

GENERAL NOTES

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE NEW JERSEY UNIFORM CONSTRUCTION CODE (NJAC 5:23) AND ALL APPLICABLE MODEL BUILDING SUBCODES, INCLUDING BUT NOT LIMITED TO:
 NEW JERSEY INTERNATIONAL BUILDING CODE, 2021
 ICC/ANSI 117.1, 2021 ACCESSIBLE AND USABLE BUILDING AND FACILITIES INTERNATIONAL MECHANICAL CODE, 2021
 NATIONAL ELECTRICAL CODE, 2017
 NATIONAL STANDARD PLUMBING CODE, 2021

ALL WORK SHALL BE PERFORMED DURING NORMAL WORK HOURS, AS SET FORTH IN THE MUNICIPAL ORDINANCE WHICH HOLDS JURISDICTION OVER THE AREA OF WORK, UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THESE CONTRACT DOCUMENTS, SPECIFICATIONS, OR OTHER WRITTEN AGREEMENTS BETWEEN OWNER AND CONTRACTOR.

THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK-SITE AND PROTECT ALL BUILDING MATERIALS FROM THE ELEMENTS AND FROM ON-GOING CONSTRUCTION WORK AS NECESSARY TO MAINTAIN THE MATERIAL INTEGRITY.

THE AREA OF WORK SHALL BE SEPARATED FROM ALL OTHER OCCUPIED AREAS BY MINIMUM 6 MIL POLY ETHYLENE DUST CURTAIN, WHERE AREAS OF WORK ARE ADJACENT TO PUBLIC AREAS TO BE OCCUPIED AND CONSTRUCTION PARTITIONS ARE SPECIFIED IN OTHER AREAS OF THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, THE AREA OF WORK SHALL BE SEPARATED BY A UL DESIGN U465 ONE HOUR CONSTRUCTION PARTITION FROM FLOOR TO CEILING ABOVE THE MIN. 5/8" G.W.B. EACH SIDE OF 3-5/8" METAL STUD FRAMING AT 16" O.C. AND 3" S.A.F.B. IN THE STUD CAVITY. ALL CONSTRUCTION PARTITION REQUIREMENTS SHALL COMPLY WITH NJAC 5:23-9.6(C) IN ALL CASES.

WHEN NOT SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS, ALL SITE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE MUNICIPALITY HAVING JURISDICTION OVER THE PROJECT AREA AND ICC/ANSI 117.1, 2021

ALL LANDSCAPING SHALL BE INSTALLED AT SUCH TIME SO AS TO BE IN HEALTHY CONDITION AT THE TIME OF SUBSTANTIAL COMPLETION. ANY LANDSCAPE MATERIALS NOT IN SUCH CONDITION AT THE TIME OF SUBSTANTIAL COMPLETION SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, GROWING SEASON, AND CONSTRUCTION SCHEDULE IN SCHEDULING INSTALLATIONS AFTER SUBSTANTIAL COMPLETION.

ALL BEARING SOIL SHALL BE UNDISTURBED OR 100% COMPACTED SOIL TO ACCOMMODATE THE INSTALLATION OF FOOTINGS, FOUNDATION WALLS, PILING, ETC. WHEN NOT INDICATED OTHERWISE IN THESE CONTRACT DOCUMENTS AND SPECIFICATIONS VIA SOIL REPORT, BEARING CAPACITY OF THE SOIL IN THE AREA OF WORK SHALL BE CONSIDERED TO BE 3,000 PSI WITHOUT DETRIMENTAL SETTLEMENT. IN SUCH CASES, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TESTING TO VERIFY THIS CONDITION PRIOR TO COMMENCEMENT OF WORK.

FOOTINGS SHALL BE LOCATED A MINIMUM OF 30" BELOW GRADE, UNLESS OTHERWISE INDICATED IN THESE DOCUMENTS.

IN PERFORMING ANY EARTHWORK, ALL EXCAVATED AREAS SHALL BE PROVIDED WITH TEMPORARY SUPPORTS AND/OR SHORING TO PREVENT ANY COLLAPSE. EXCAVATED SOILS, FILL, ETC. SHALL BE STORED SO AS NOT TO EXCEED THE ANGLE OF REPOSE FOR EACH TYPE. ALL BEARING SOIL, WHEN EXCAVATED AND STORED SHALL BE PROPERLY PROTECTED FROM THE ELEMENTS UNTIL BACKFILLING.

BACKFILLING SHALL BE PERFORMED IN MAX. 6" LIFTS UNLESS OTHERWISE INDICATED IN THESE DOCUMENTS. EACH LIFT SHALL BE TAMPED PRIOR TO CONTINUING WORK.

ALL MISCELLANEOUS WOOD SHALL BE MIN. NO. 1 OR BETTER DOUGLASS FIR. WOOD NAILERS, BLOCKING, ETC. IN FOUNDATION CONSTRUCTION SHALL BE TREATED TO RESIST DECAY.

ALL CRAWL SPACES AND SLAB ON-GRADE CONDITIONS SHALL BE PROVIDED WITH 6 MIL POLYETHYLENE VAPOR BARRIER FOR THE ENTIRE FOOTPRINT AND MIN. 24" WIDE 2" RIGID INSULATION AT THE ENTIRE PERIMETER OF THE BUILDING FOOTPRINT.

ALL CONCRETE TO BE PROVIDED SHALL BE MIN. 4,000 PSI IN 28 DAYS UNLESS INDICATED OTHERWISE IN THESE DOCUMENTS.

ALL CONCRETE MASONRY UNITS WHEN LOAD-BEARING SHALL CONFORM TO ASTM C34-84. IN NON-LOAD-BEARING APPLICATIONS MASONRY UNITS SHALL COMPLY WITH C56-81.

ALL DOORS AND WINDOWS AT EXTERIOR WALLS SHALL BE PROVIDED WITH ALUM. SILL FLASHING UNDER THE ENTIRE WIDTH OF THE OPENING. AT WINDOW AREAS, FLASHING SHALL HAVE UPTURNED EDGES WITH SOLDERED CORNERS AND PITCH TO THE EXTERIOR. ALL WINDOWS AND DOORS SHALL BE PROVIDED WITH SHIM SPACES AT THE PERIMETER TO ENSURE A PLUMB AND TRUE INSTALLATION.

ALL GLAZING IN HAZARDOUS AREAS AS DEFINED IN 2406.2 SHALL BE TEMPERED GLAZED SAFETY GLASS AND SHALL BE IMPACT-RESISTANT GLAZED OPENINGS.

ALL GYPSUM WALL BOARD TO BE 5/8" FIRECODE 'C' UNLESS INDICATED OTHERWISE IN THE DOCUMENTS.

ALL BATHROOM AND KITCHEN AREAS SHALL BE PROVIDED WITH WATER-RESISTANT G.W.B., TYPICAL. ALL TILE AREAS SHALL BE PROVIDED WITH CEMENTITIOUS BOARD BACK-UP UNLESS INDICATED OTHERWISE.

IN ALL PAINTED WALL AREAS, G.W.B. SHALL BE TAPED AND SPACKLED TO MIN. LEVEL 4 FINISH.

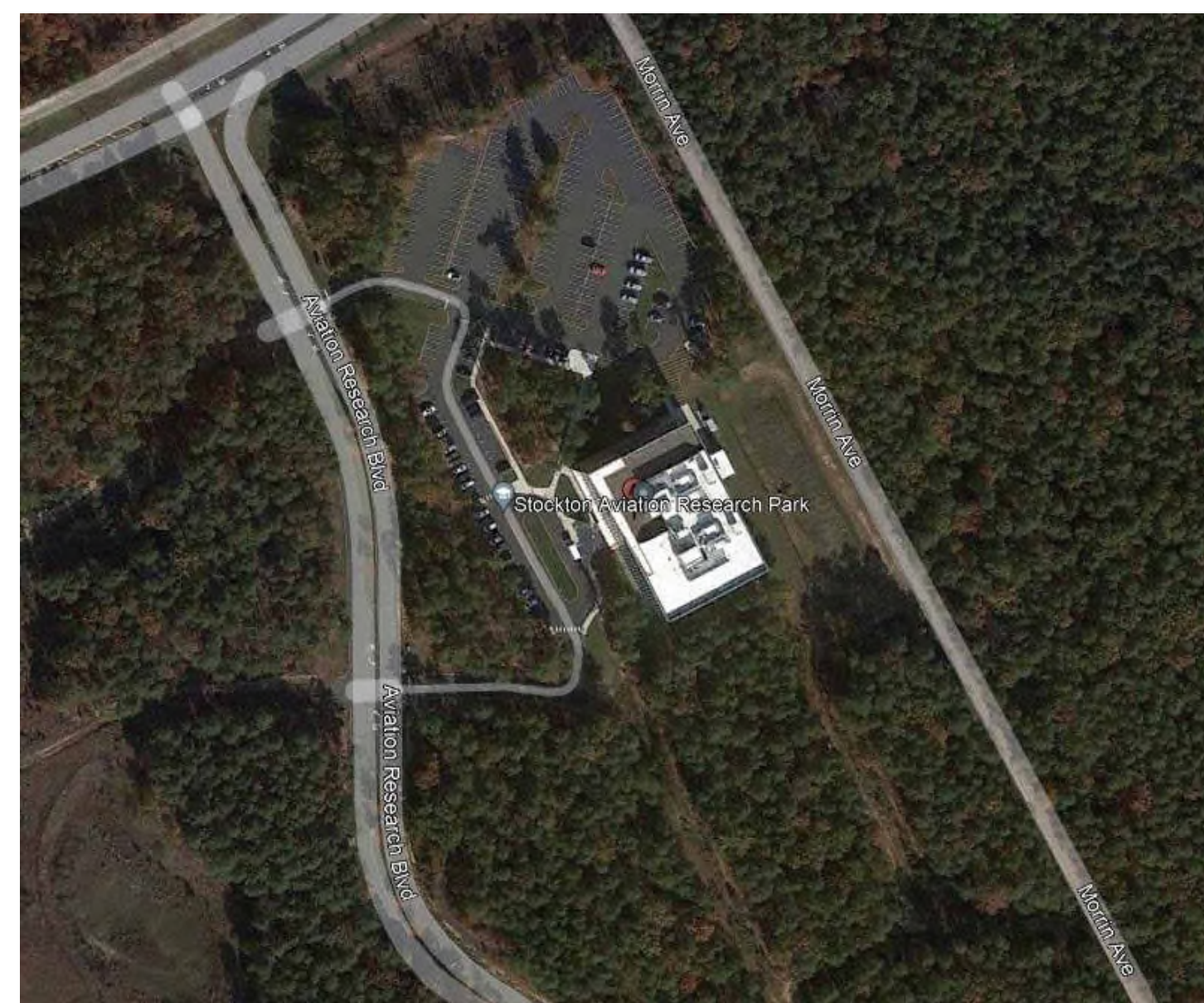
IN ALL WALL-COVERED AREAS, G.W.B. SHALL BE TAPED AND SPACKLED TO MIN. LEVEL 4. FINISH.

SHOP DRAWINGS SHALL BE REQUIRED FOR ALL MILLWORK.

ALL THRESHOLDS AND OTHER FLOORING TRANSITIONS SHALL COMPLY WITH THE FLOOR LEVEL CHANGES CONSTITUTED IN ICC/ANSI 117.1, 2021.

ALL SPECIALTIES, ACCESSORIES, OR OTHER WALL-MOUNTED EQUIPMENT, FIXTURES, ETC. SHALL BE PROVIDED WITH NON-COMBUSTIBLE BLOCKING IN THE WALL CAVITY FOR SUPPORT UNLESS SPECIFICALLY NOTED OTHERWISE.

ALL ELEVATOR PITS (WHERE APPLICABLE) SHALL BE PROVIDED WITH SUMP PUMP CONNECTED TO THE BUILDING STORM WATER SYSTEM. THE PIT SHALL BE PROVIDE WITH A GALV. STEEL ACCESS LADDER MOUNTED IN AN OSHA COMPLIANT LOCATION WITH WORK LIGHT AND SWITCH ACCESSIBLE FROM THE POINT OF ENTRY. ALL ELEVATOR DOORS SHALL BE PROVIDED WITH STRUCTURAL STEEL SILL ANGLES AS REQUIRED BY THE MANUFACTURER.



AERIAL MAP



TENANT IMPROVEMENTS TO SIGNATURE SCIENCE

600 AVIATION RESEARCH BOULEVARD
 EGG HARBOR TOWNSHIP, NJ 08234

OWNER: ATLANTIC COUNTY IMPROVEMENT AUTHORITY
 600 AVIATION RESEARCH BLVD.
 EGG HARBOR TOWNSHIP, NJ 08234

TENANT: SIGNATURE SCIENCE
 TEXAS

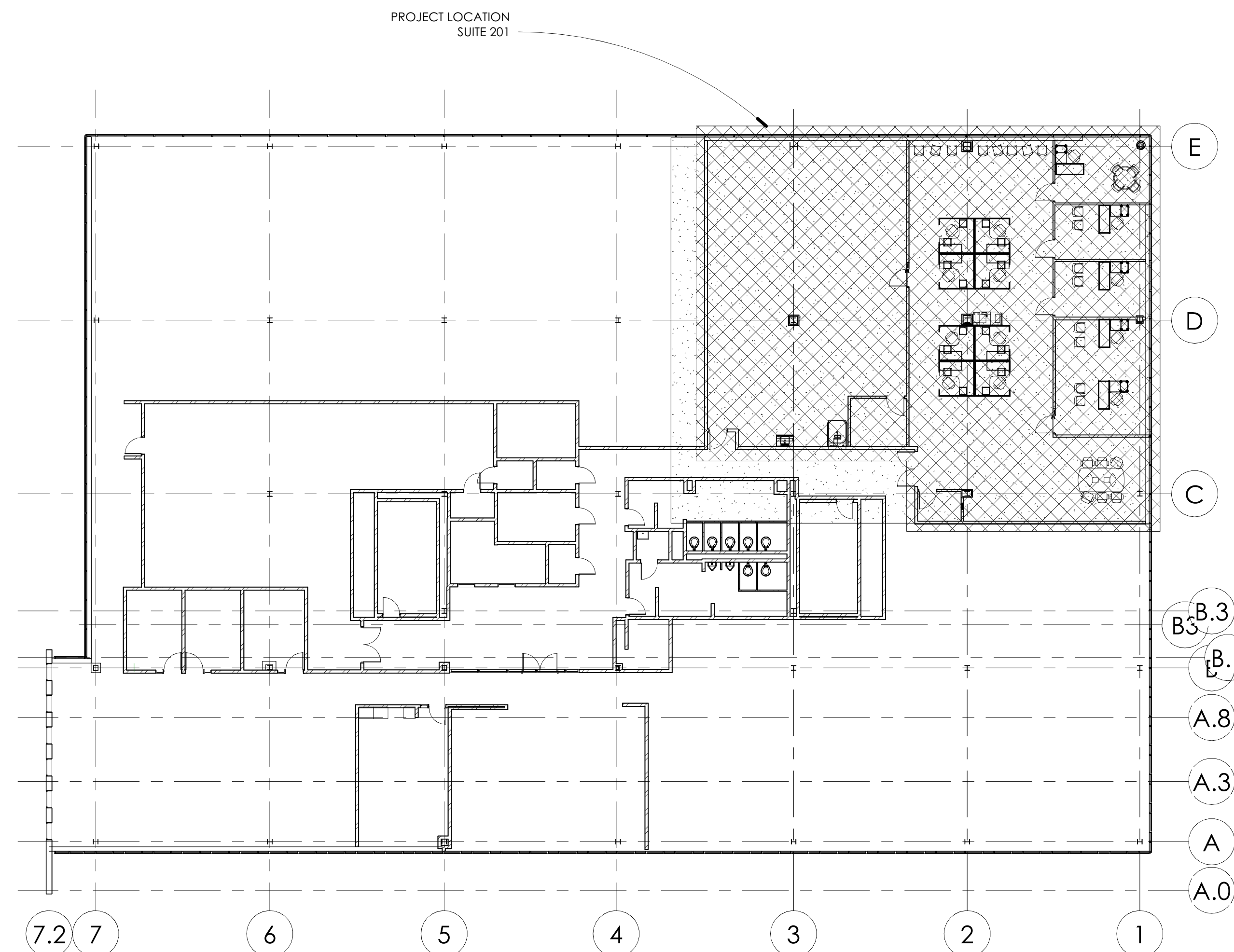
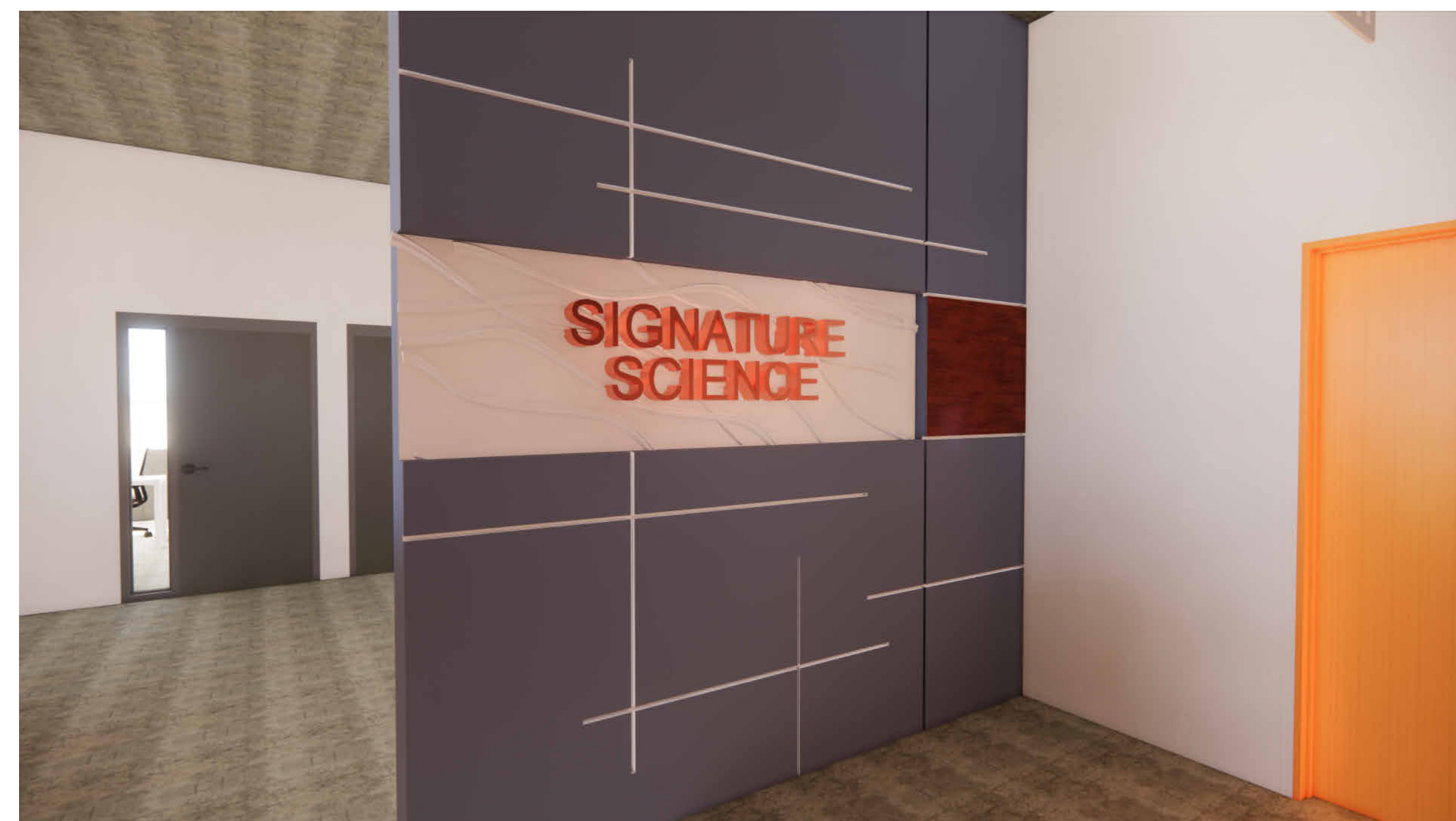
ARCHITECT: WILLIAM MCLEES ARCHITECTURE
 5 MACARTHUR BOULEVARD
 SOMERS POINT, NJ 08244
 CONTACT: WILLIAM MCLEES, AIA
 609.927.0888

BUILDING CODE ANALYSIS

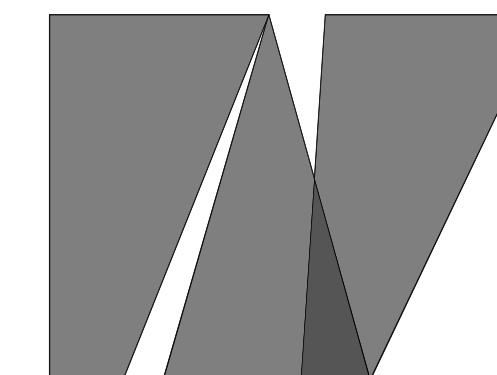
This work is governed by the New Jersey Uniform Construction Code, New Jersey Edition of the 2021 International Building Code and all other applicable subcodes as adopted therein. This work shall qualify as an **ALTERATION** under the requirements and definitions of the New Jersey U.C.C.

Total Tenant Area:	Enclosed
Building Footprint:	4700 S.F.
Use Group:	22,909 S.F.
Construction Class:	B
Occupant Load:	II B
	32

DRAWING LIST				
SHEET NUMBER	SHEET NAME	ISSUE DATE	CURRENT REVISION	REVISION DATE
SK01	DETAILS	09/21/23		
G0.00	COVER SHEET	8.16.23		
G1.00	LIFE SAFETY PLANS	8.16.23		
D1.00	DEMOLITION PLAN	8.16.23		
A1.00	FLOOR PLANS	8.16.23		
A1.02	REFLECTED CEILING PLAN	8.16.23		
A1.01	FURNITURE FIXTURE AND EQUIPMENT PLAN	8.16.23		
A2.00	INT. DETAIL ELEVATIONS	8.16.23		
A3.00	DOOR TYPES & FINISH SCHEDULE	8.16.23		



I KEY PLAN- SECOND FLOOR
 1/16" = 1'-0"



william mclees
 architecture

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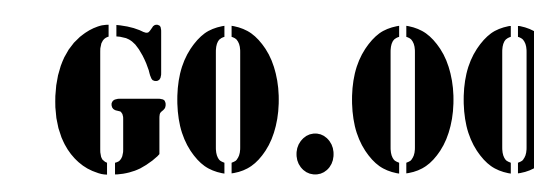
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RE-BID ISSUE

No.	Description	Date

COVER SHEET

Scale As indicated
 Drawn by MAC
 Date 8.16.23



Comission no. 23031

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LIFE SAFETY PLANS

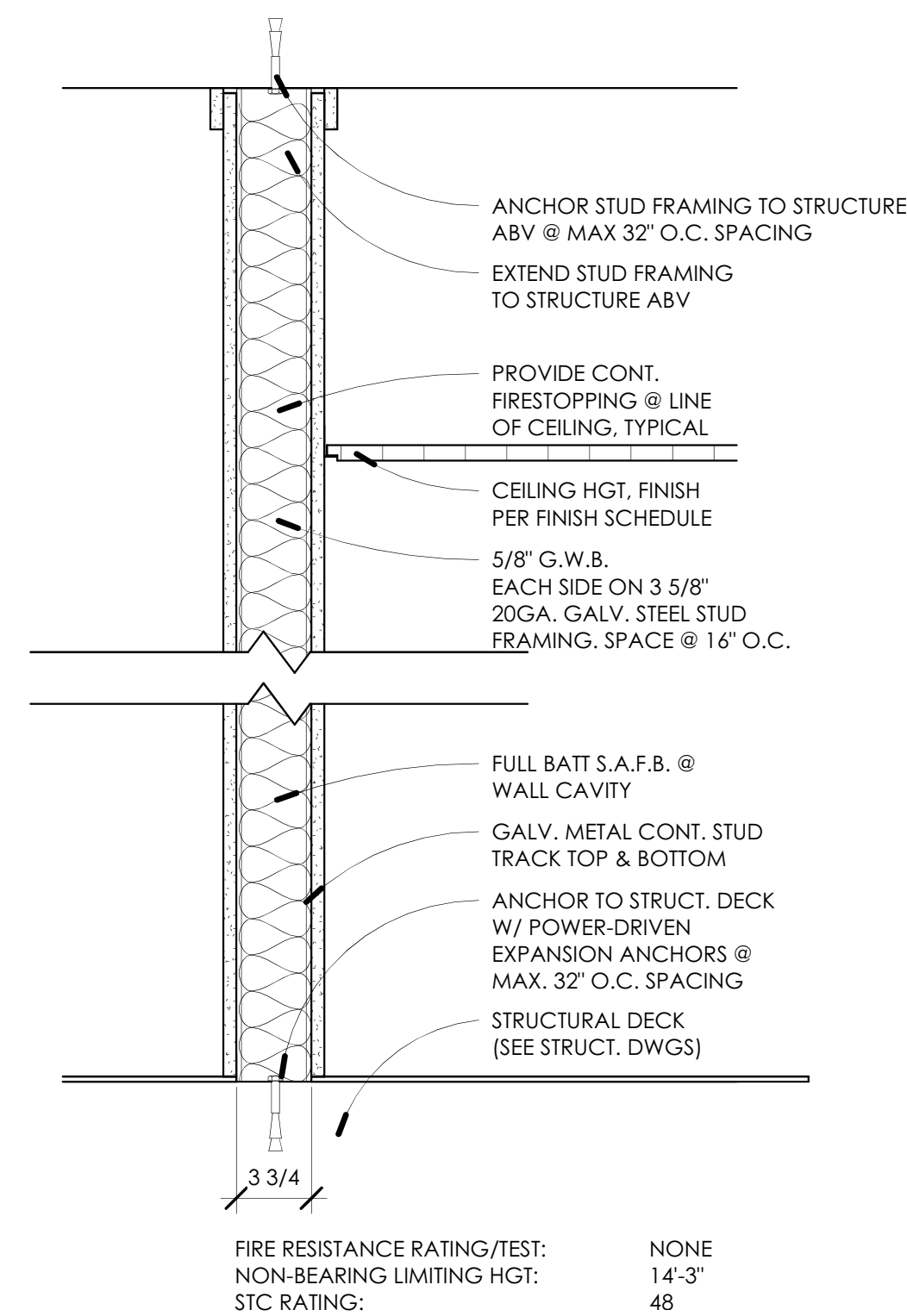
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G1.00

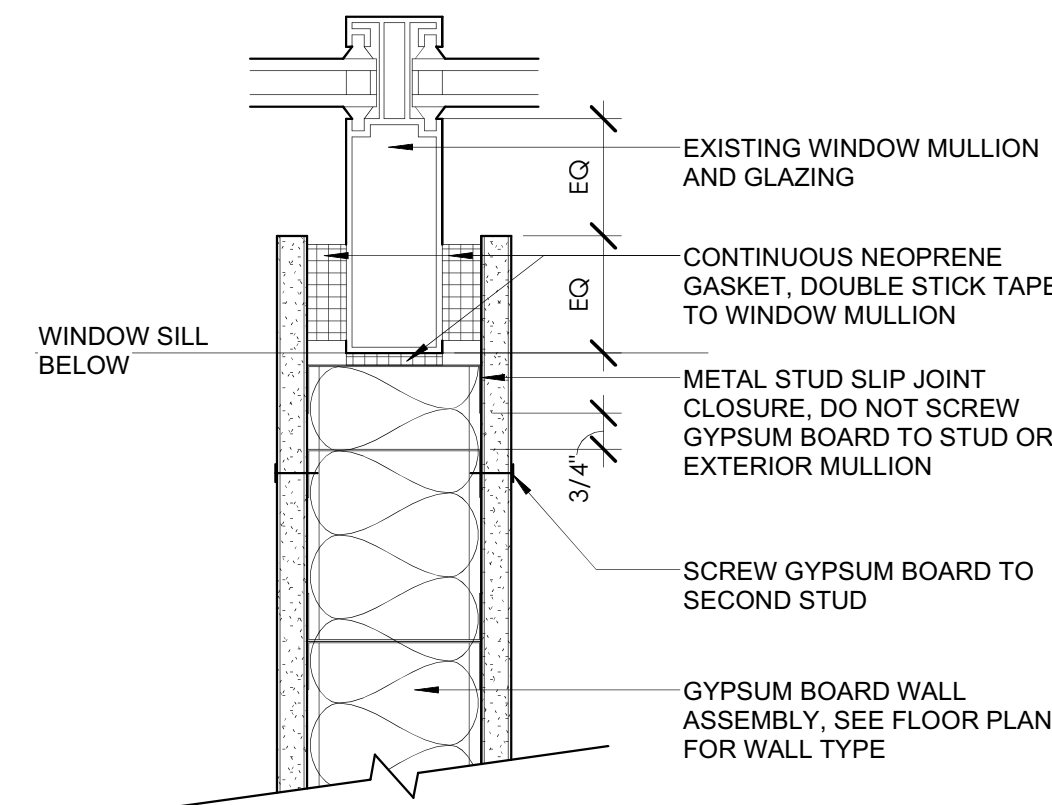
Comission no. 23031



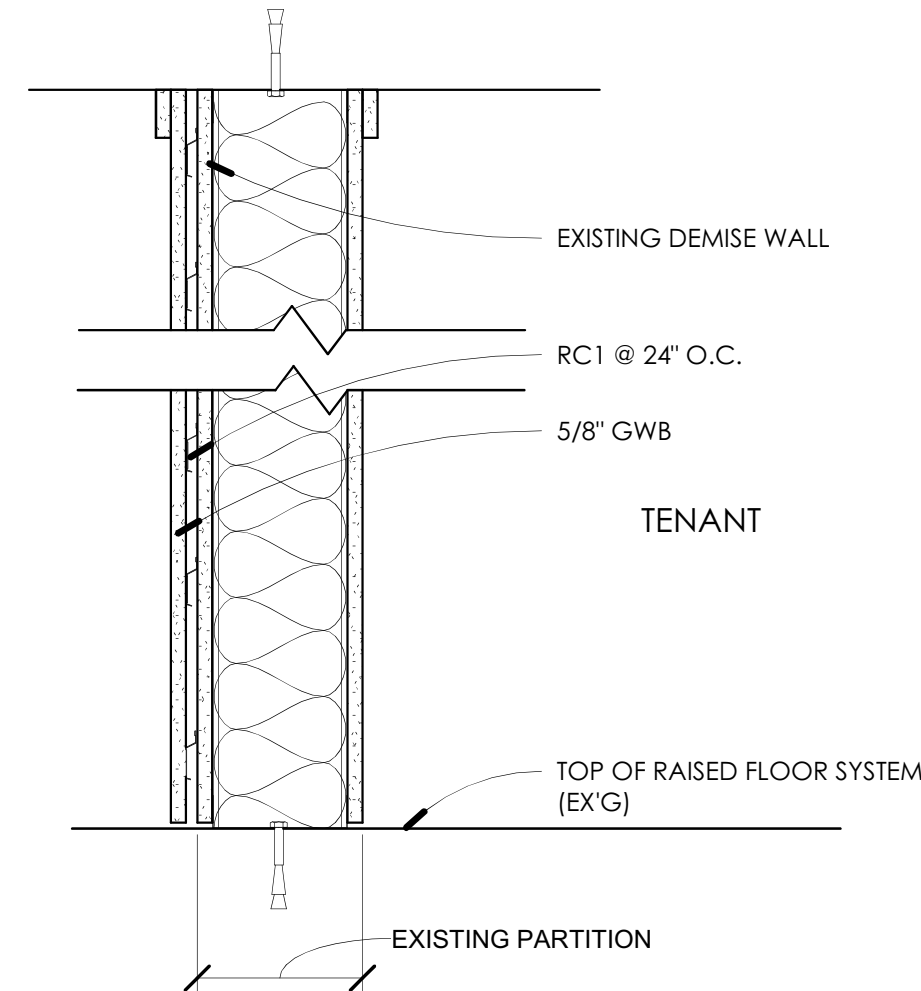
1 LIFE SAFETY PLAN
1/8" = 1'-0"



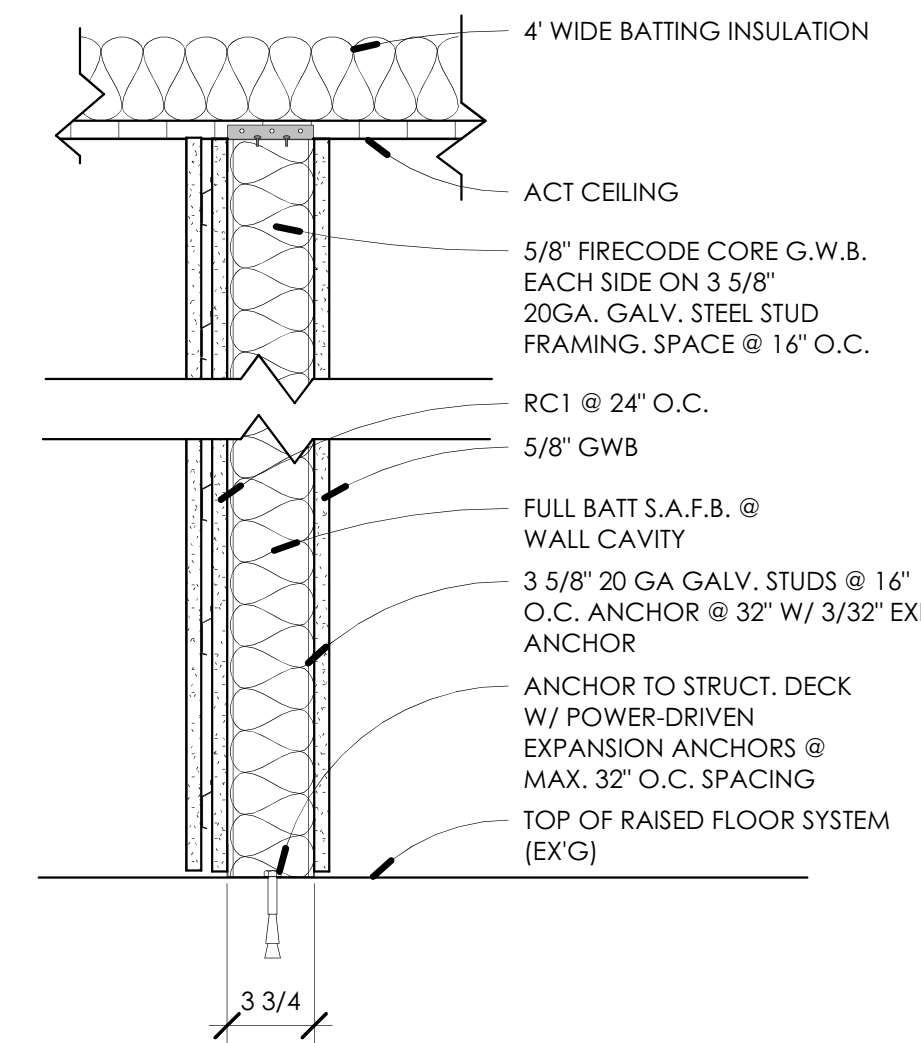
3 PARTITION 040
1 1/2" = 1'-0"



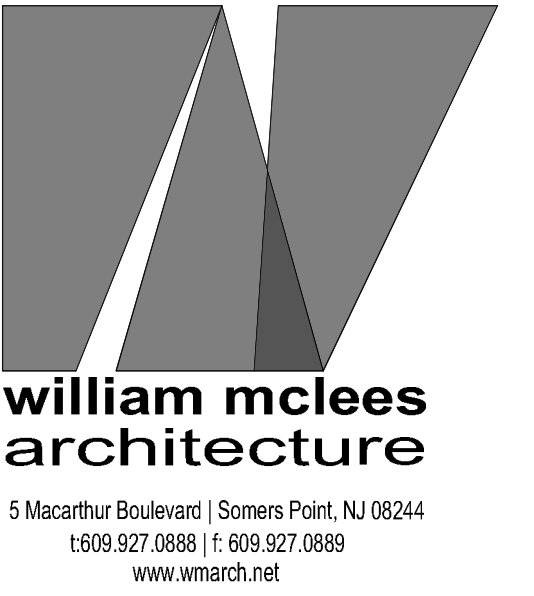
2 PARTITION AT EXTERIOR MULLION
3" = 1'-0"



5 DEMISING ACOUSTIC WALL
1 1/2" = 1'-0"



4 PARTITION 041
1 1/2" = 1'-0"



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No.	Description	Date

DEMOLITION PLAN

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Date 8.16.23

D1.00

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DEMOLITION GENERAL NOTES:

GC SHALL COORDINATE WITH THE OWNER ON ALL DEMOLITION AREAS PRIOR TO COMMENCEMENT OF WORK SO AS TO MINIMIZE DISRUPTION OF TENANTS, OCCUPANTS, ETC.

GC SHALL PROVIDE THE OWNER AND AFFECTED TENANTS WITH 48 HOURS NOTICE PRIOR TO ANY UTILITY SHUT OFFS IN CONJUNCTION WITH THE SCOPE OF WORK. DURATION AND SCHEDULED COMPLETION SHALL BE PROVIDED TO THE SAME AT SUCH TIME.

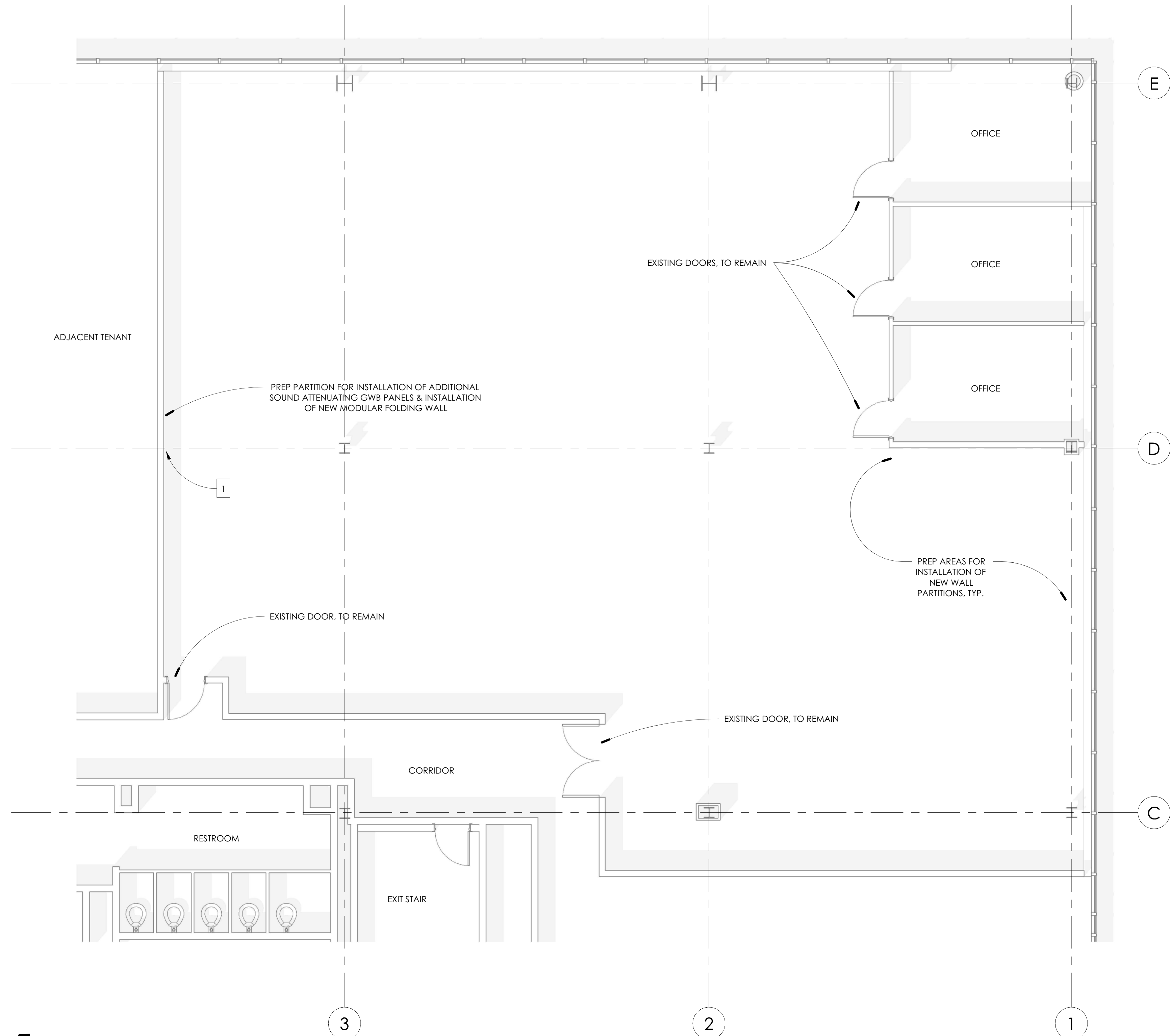
GC SHALL STAGE ALL DEMOLITION SO AS TO MAINTAIN THE FUNCTION OF ALL LIFE SAFETY SYSTEMS IN THE BUILDING DURING DEMOLITION AND ALL OTHER PHASES OF WORK. IF MODIFICATIONS TO THE LIFE SAFETY SYSTEMS ARE REQUIRED, THE CONTRACTOR SHALL PROVIDE TEMPORARY REDUNDANT SYSTEMS FOR THE FULL DURATION OF THIS PORTION OF WORK.

GC SHALL COORDINATE WITH THE OWNER AND THE BUILDING OFFICIAL DURING DEMOLITION OF EXIT STAIR AREAS IN ORDER TO MAINTAIN EGRESS CAPACITY FOR THE ENTIRE BUILDING DURING ALL PHASES OF WORK.

STAGING AREAS SHALL BE CONTAINED COMPLETELY WITHIN THE CONFINES OF THE SITE AND SHALL BE COORDINATED WITH THE OWNER'S NEEDS/USE OF THE SITE.

DEMOLITION KEY NOTES

1 RELOCATE THE EXIS'G OUTLET INTO NEW WALL FINISH



1 DEMOLITION PLAN
3/16" = 1'-0"

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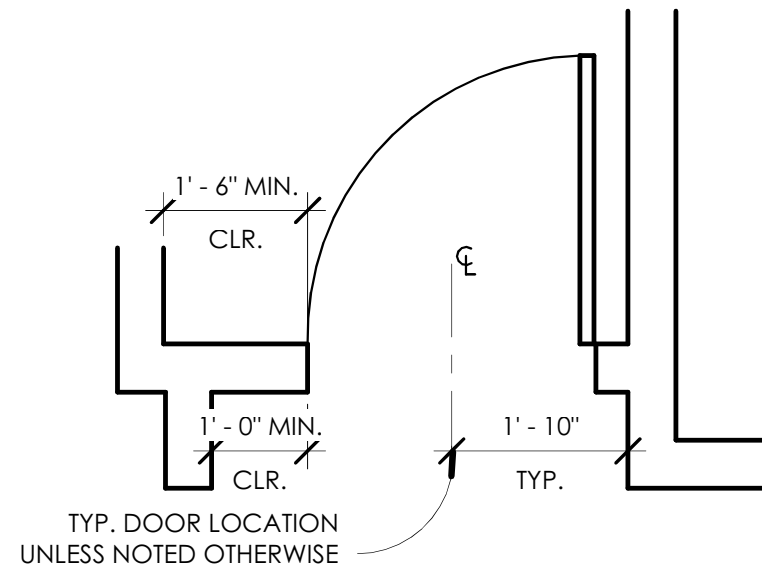
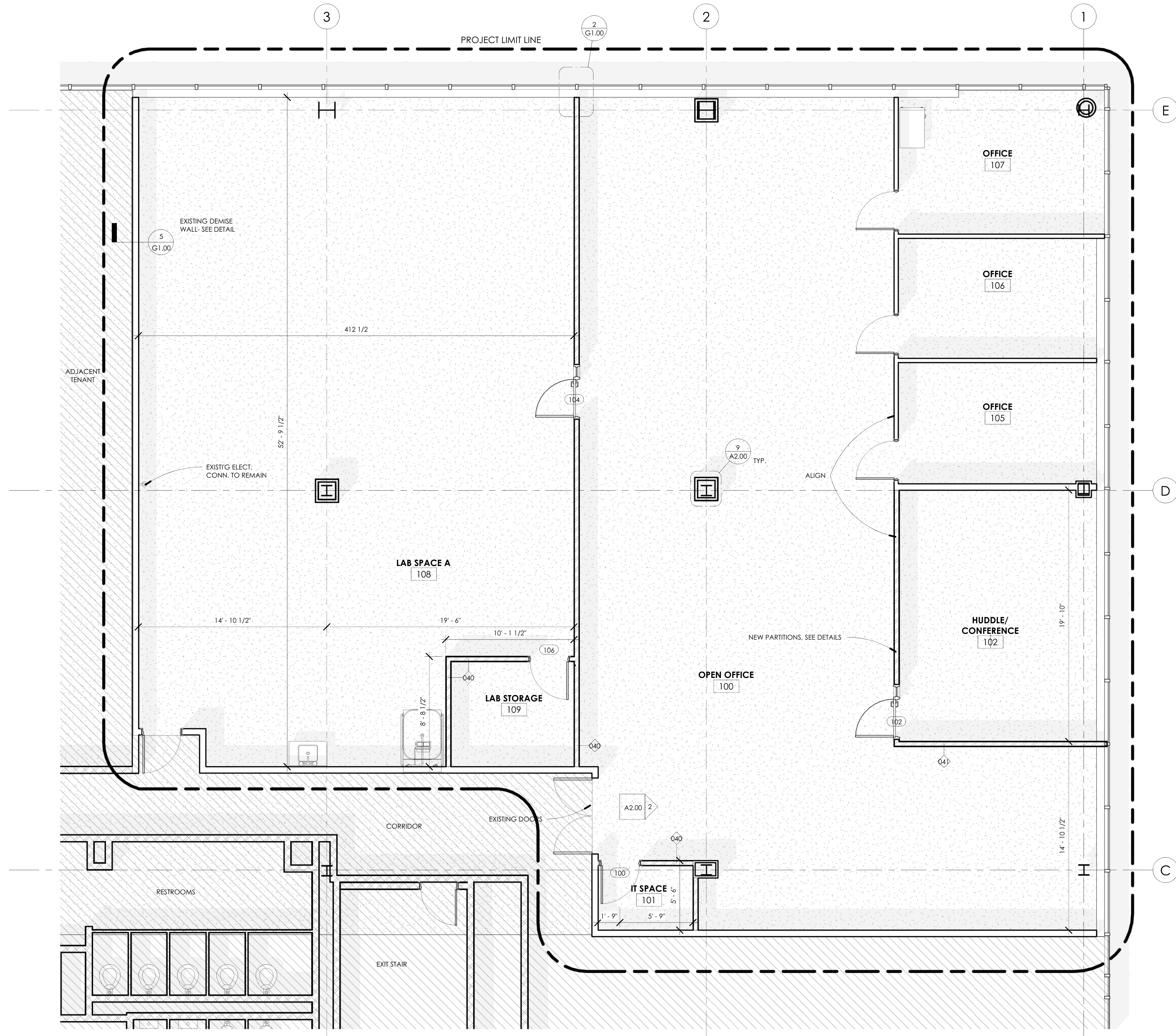
No.	Description	Date

FLOOR PLANS

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Date 8.16.23

A1.00

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2 TYPICAL DOOR DETAIL
1/2" = 1'-0"

FLOOR PLAN LEGEND

	DATUM TAG (HEIGHT ABOVE NAVD 88)
	WALL WIDTH
	FIRE RATING
	WALL TYPE TAG
	DOOR TYPE TAG
	WINDOW TYPE TAG
	ROOM NAME
	ROOM NUM
	OCC. GR. SF
	ROOM TAG
	DRAWING SHEET
	SECTION
	ENLARGED VIEW
	MASONRY PARTITION
	FRAMED PARTITION
	HINGED DOOR
	DOUBLE DOOR
	DOUBLE ACTING DOOR
	WINDOW WALL

1 SUITE 201 FLOOR PLAN
1/4" = 1'-0"

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RE-BID ISSUE

No.	Description	Date

**FURNITURE FIXTURE
AND EQUIPMENT
PLAN**

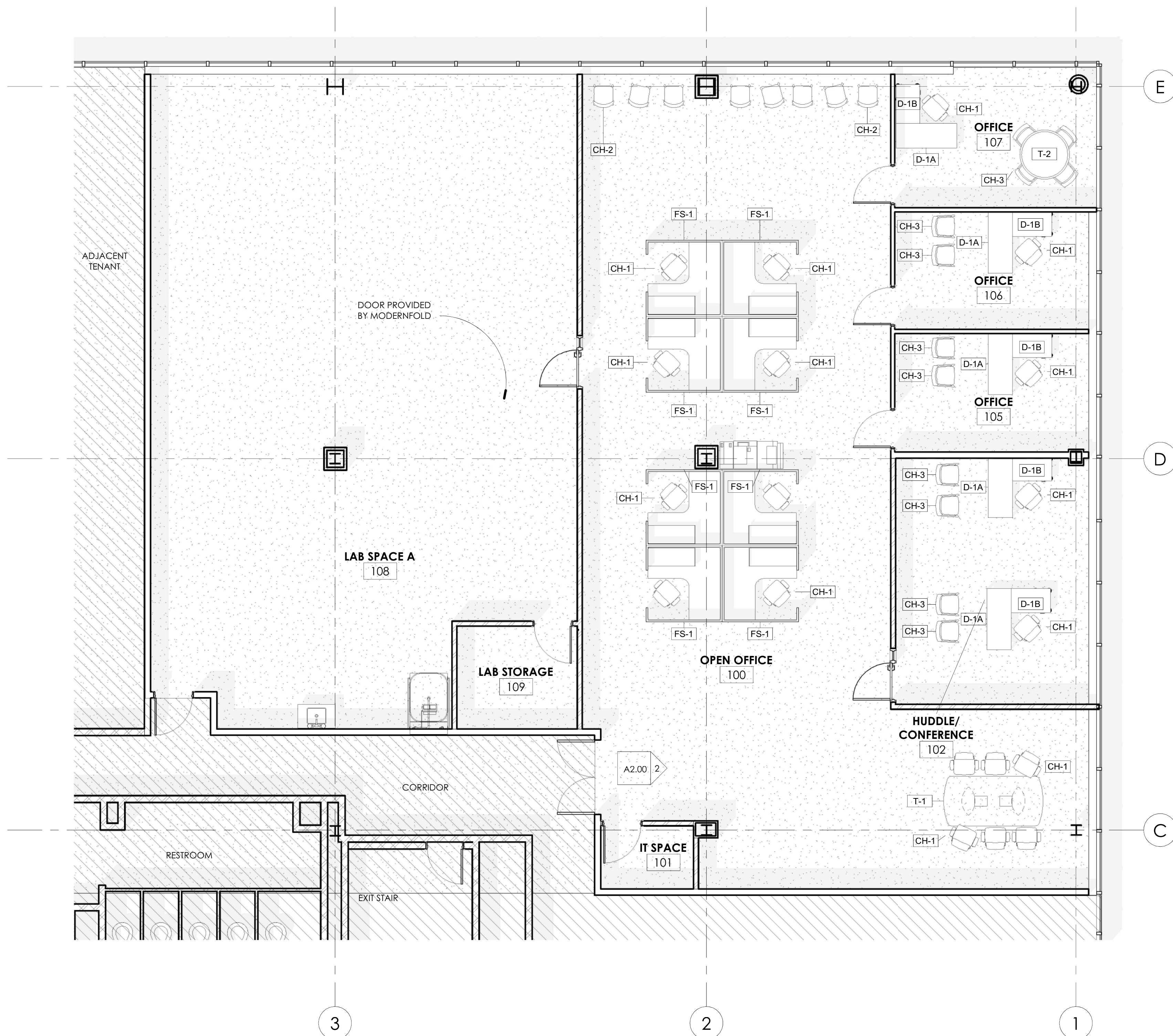
Scale 3/16" = 1'-0"
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Date 8.16.23

A1.01

Comission no. 23031

FURNITURE and EQUIPMENT SCHEDULE

UNIT	DESCRIPTION	MANUFACTURER	MODEL	Count	Comments
CH-1	OFFICE CHAIR	STEELCASE		19	
CH-2	COUNTER HEIGHT STOOL WITH BACK	HAWORTH		8	
CH-3	GUEST CHAIR	HAWORTH		12	
D-1A	OFFICE DESK	STEELCASE		5	
D-1B	OFFICE DESK RETURN WITH PEDESTAL	STEELCASE		5	
T-1	CONFERENCE TABLE	STEELCASE		1	
T-2	ROUND CONFERENCE TABLE	STEELCASE		1	



1 FF&E FLOOR PLAN
3/16" = 1'-0"

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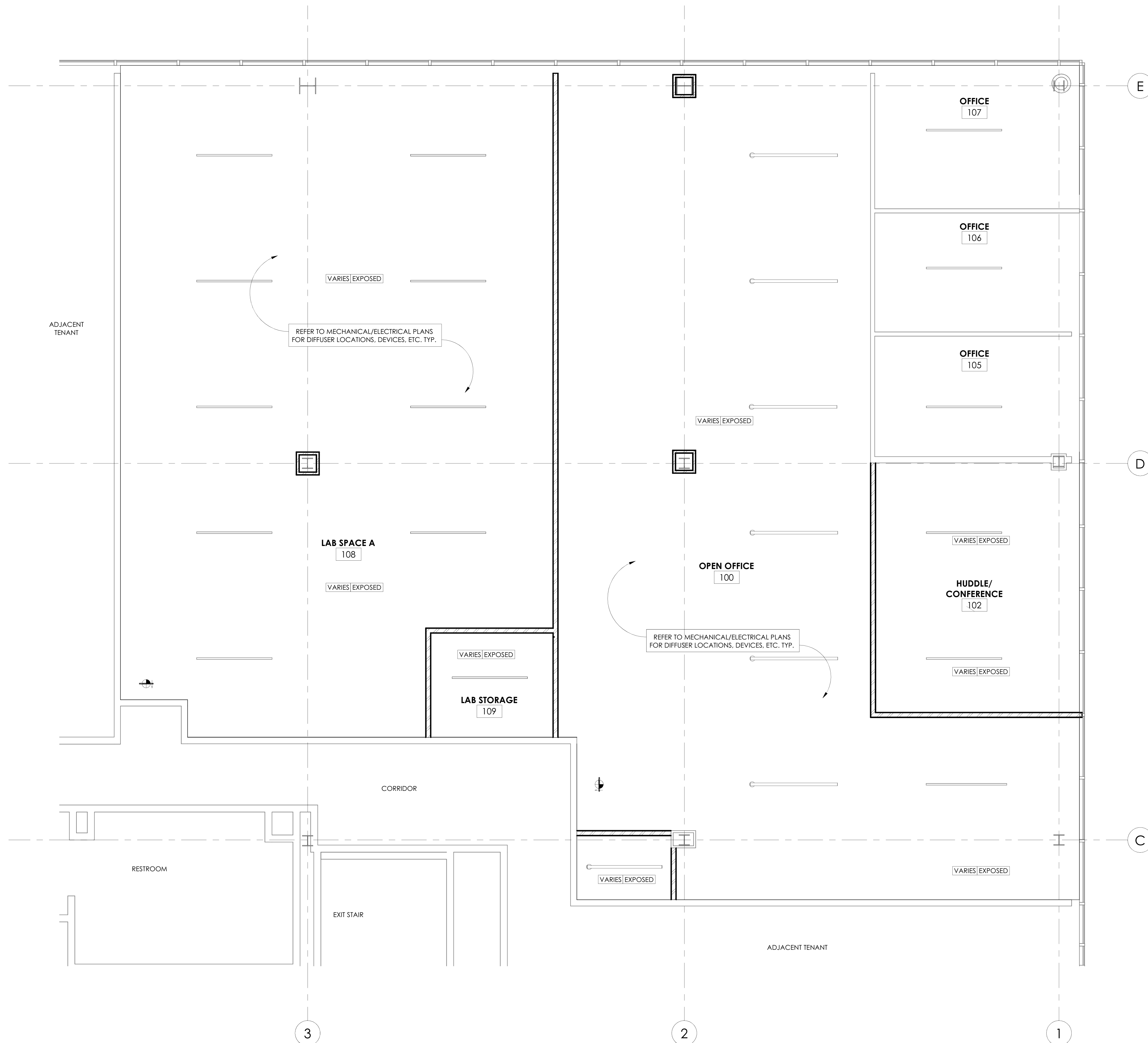
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**REFLECTED CEILING
PLAN**

Scale 1/4" = 1'-0"
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Date 8.16.23

A1.02

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REFLECTED CEILING LEGEND

- 9'-0" GWB CEILING TAG
- CEILING FINISH MATERIAL
- CEILING HT. A.F.F.
- T THERMOSTAT
- ⊕ DIRECT VENT THRU ROOF
- ⊗ SUPPLY DIFFUSER
- ⊘ RETURN VENT
- ⊙ SMOKE DETECTOR
- ⊙ CO DETECTOR
- ELEC. ELECTRICAL PANEL
- EXIT SIGN
- EMERGENCY LIGHT
- CEILING MOUNTED FIXTURE
- 2x2 TROFFER
- ⊕ WALL MOUNTED FIXTURE
- ⊕ SMALL PENDANT FIXTURE
- ⊕ LARGE PENDANT/CHANDELIER
- LINEAR SURFACE MOUNT LIGHT FIXTURE
- LINEAR PENDANT LIGHT FIXTURE
- FAN/LIGHT
- TRACK LIGHT

I SUITE 201 REFLECTED CEILING PLAN
1/4" = 1'-0"

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08234

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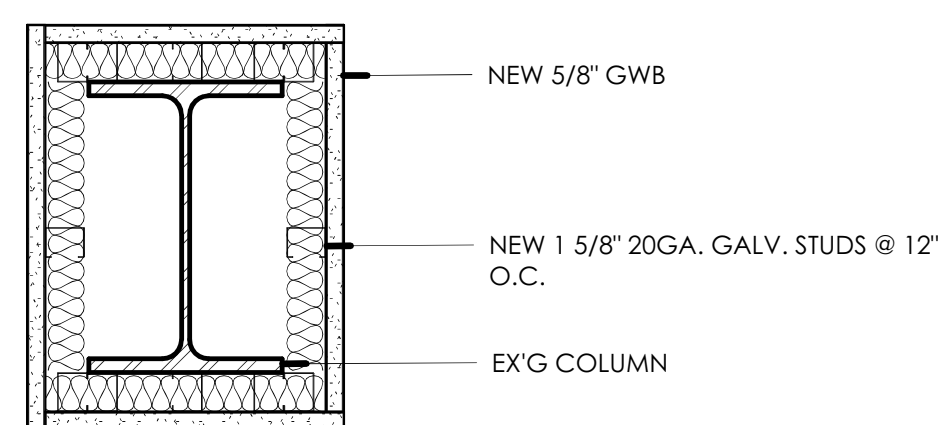
No.	Description	Date

INT. DETAIL
ELEVATIONS

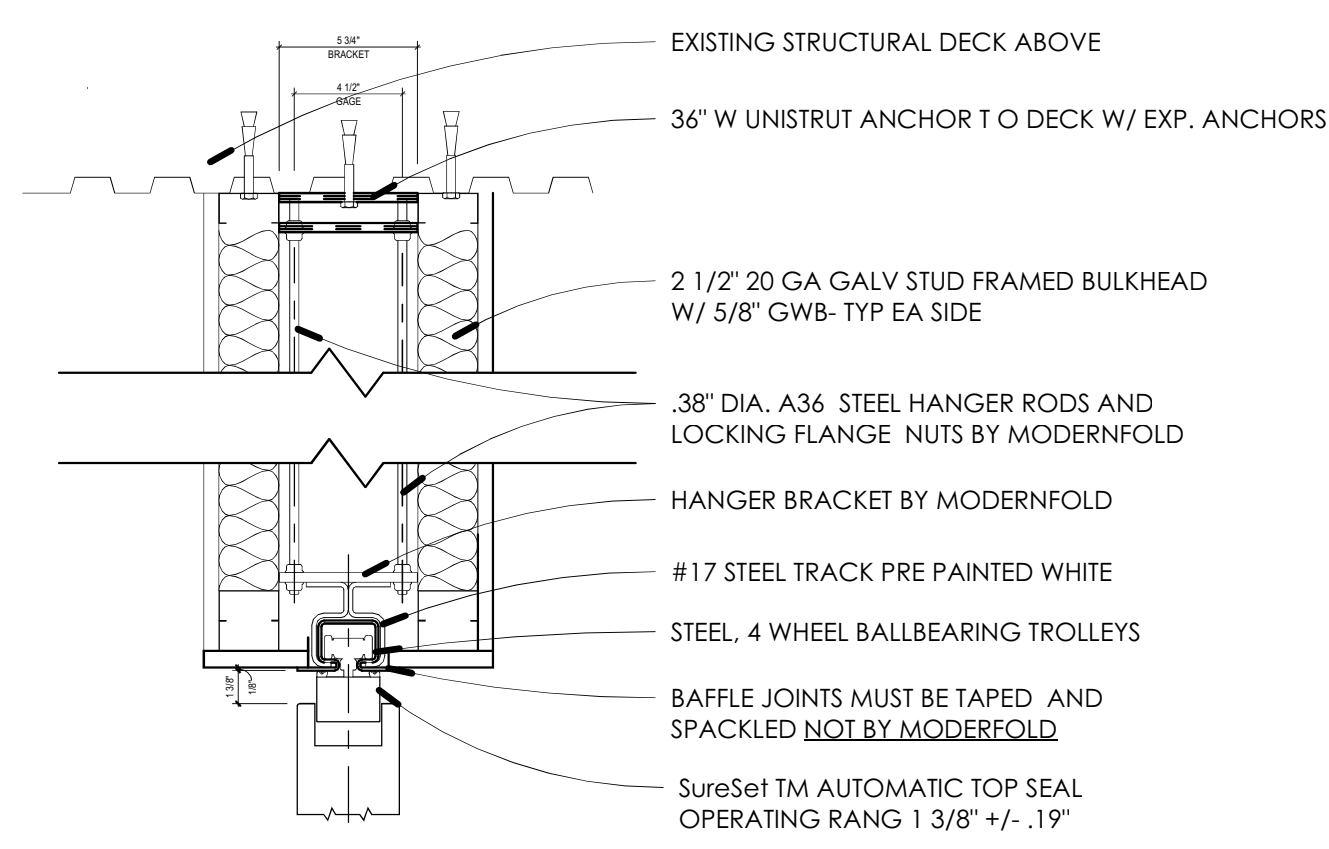
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Date 8.16.23

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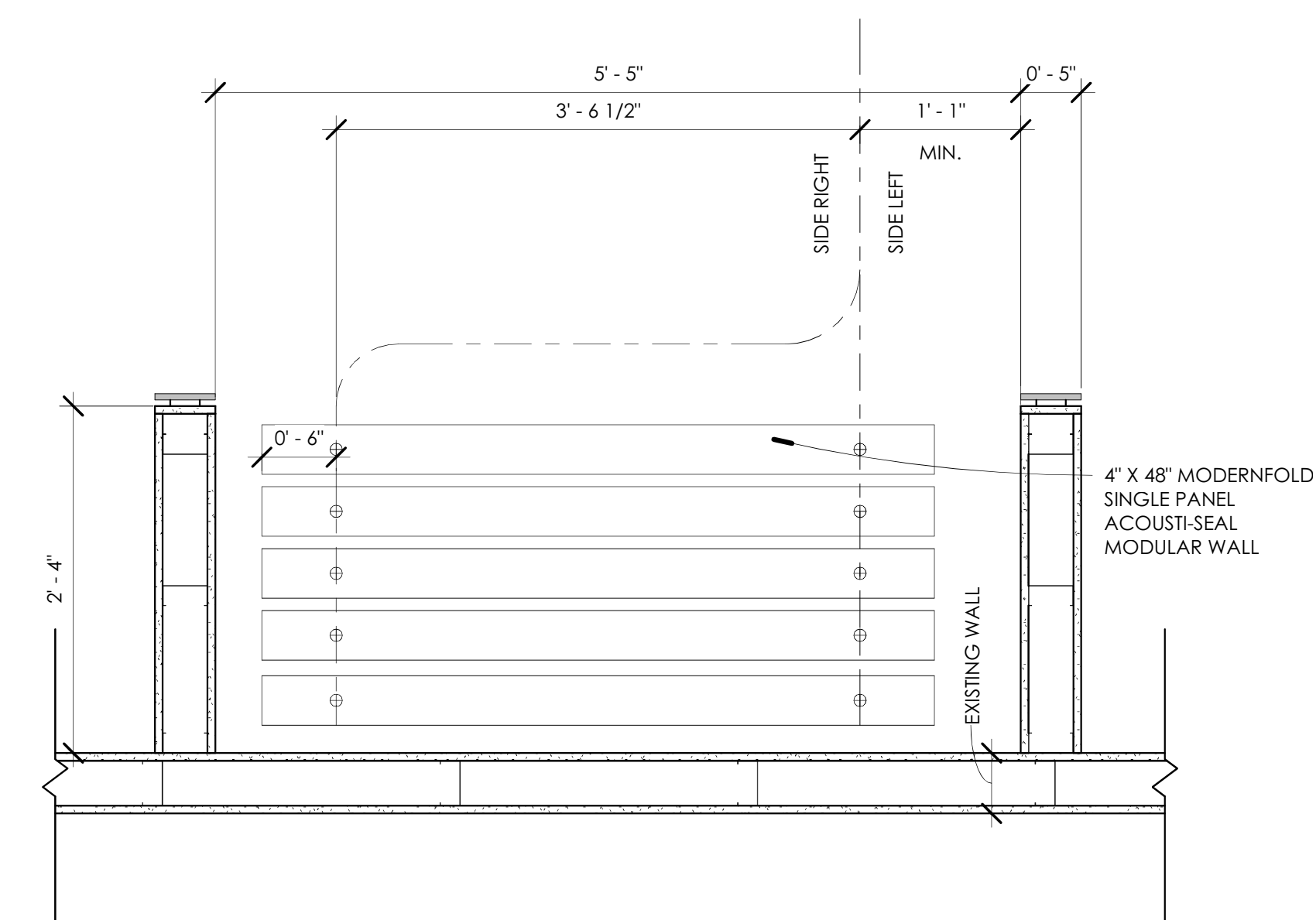
Comission no. 23031



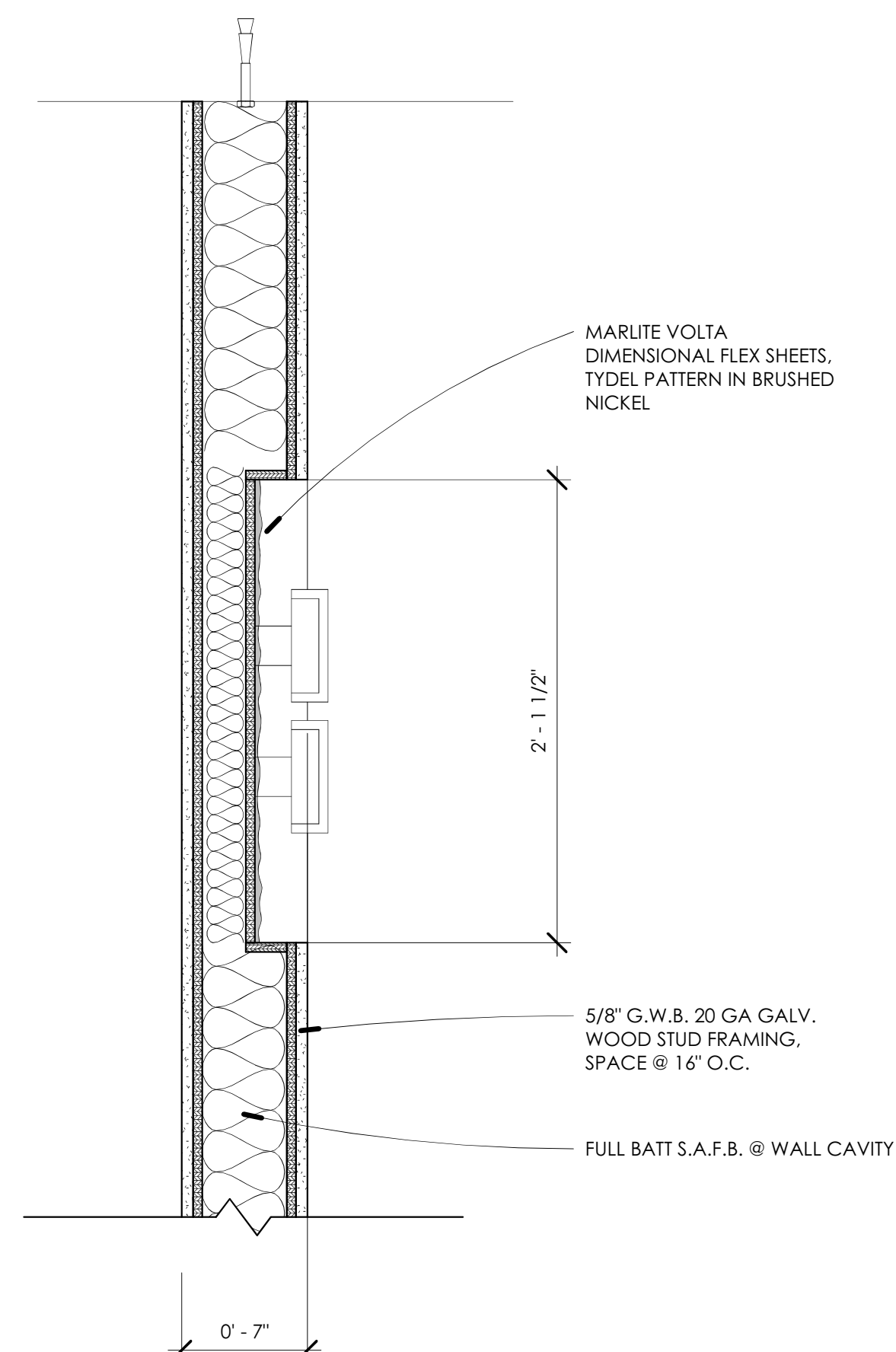
9 COLUMN DETAIL
1 1/2" = 1'-0"



7 MODULAR WALL
1 1/2" = 1'-0"



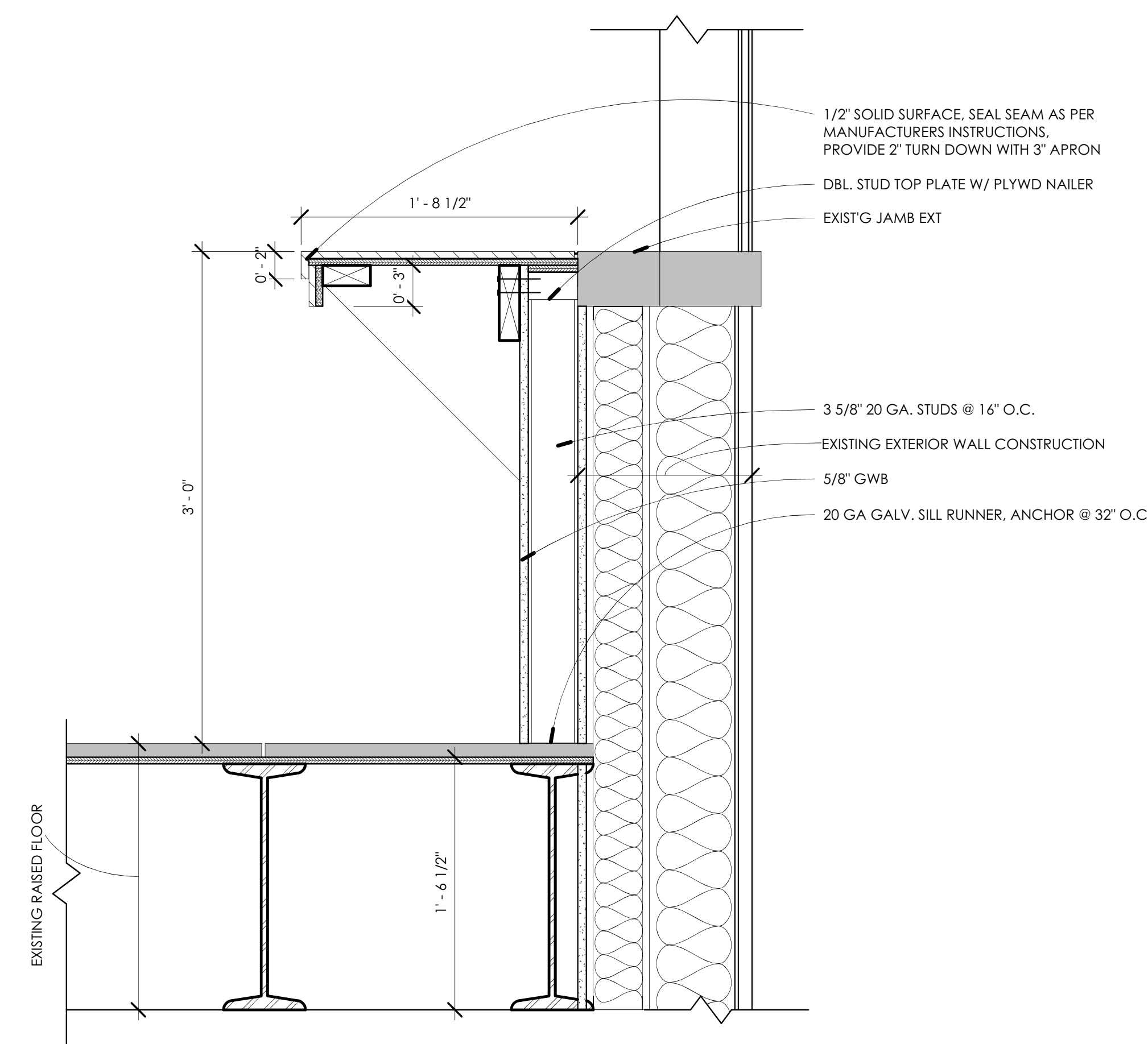
3 MODULAR WALL PLAN DETAIL
1" = 1'-0"



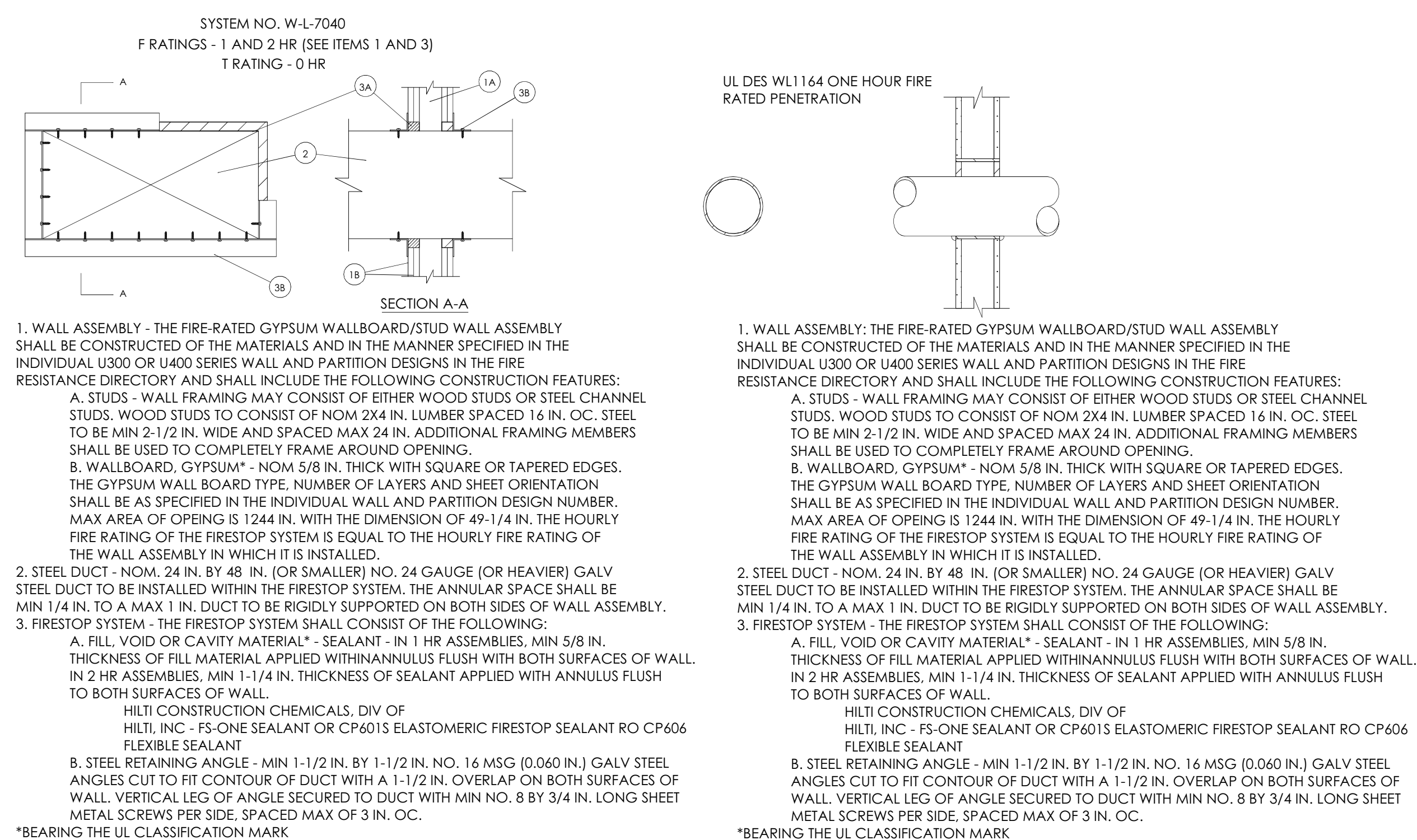
5 SIGNAGE SECTION
1 1/2" = 1'-0"



2 ENTRY SIGNAGE ELEVATION
1/2" = 1'-0"



4 LAPTOP COUNTER DETAIL
1 1/2" = 1'-0"

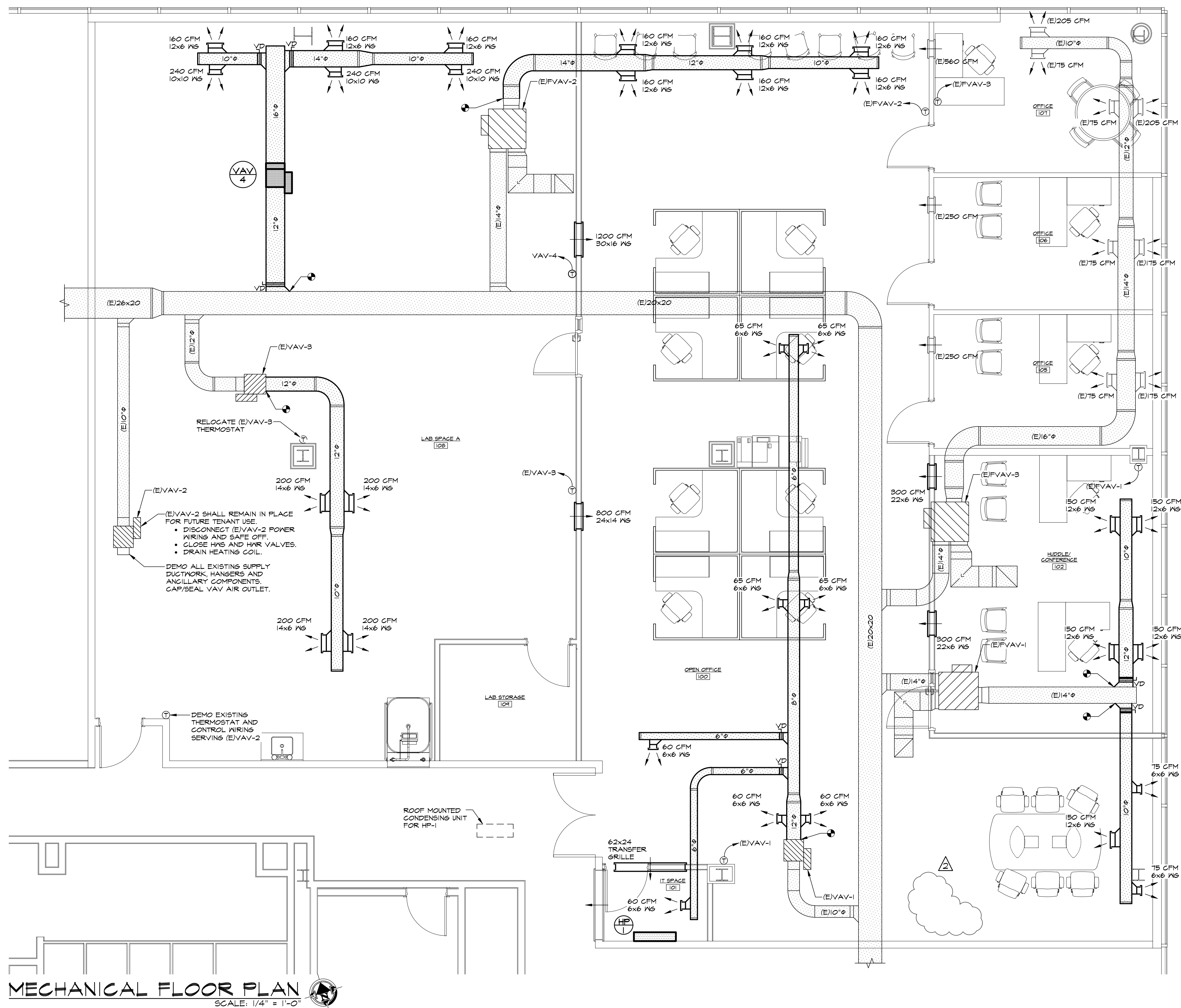


1 PENETRATION DETAILS
1" = 1'-0"

SECTION 05400 - COLD-FORMED METAL FRAMING
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: PRODUCT DATA.
B. COMPLY WITH AEST SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS FOR CALCULATING STRUCTURAL CHARACTERISTICS OF COLD-FORMED METAL FRAMING.
C. CHARACTERIZING TEST PARAGRAPH BELOW IF PROJECT IS LIMITED TO ONE- AND TWO-FAMILY RESIDENTIAL CONSTRUCTION. FRAMING IS FULLY DETAILED, AND THIS HUD DOCUMENT IS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. IF RETAINING, DELETE PERFORMANCE REQUIREMENTS AND REFERENCES TO A QUALIFIED PROFESSIONAL ENGINEER ABOVE.
D. COMPLY WITH RULES PRESCRIPTIVE METHOD FOR RESIDENTIAL COLD-FORMED METAL FRAMING.
E. PRODUCT: COLD-FORMED METAL FRAMING FROM CORROSION, DEFORMATION, AND OTHER DAMAGE DURING DELIVERY, STORAGE, AND HANDLING.
PART 2 - PRODUCTS
2.1 MATERIALS
1. PROVIDE ONE OR MORE OF GRADE REQUIREMENTS IN FIRST PARAGRAPH, OR REVISE TO A DIFFERENT GRADE IF NECESSARY. IF MULTIPLE GRADES ARE REQUIRED, IDENTIFY LOCATIONS ON DRAWINGS.
A. GALVANNEED STEEL SHEET, ASTM A 653/A 653M 55K90 ZINC COATED, STRUCTURAL STEEL, (S5), GRADE 33.
B. STEEL STUDS, C-SHAPED, WITH FLANGE WIDTH OF NOT LESS THAN 1-5/8 INCHES, MINIMUM UNCOATED STEEL THICKNESS OF .0329 INCH, AND OF DEPTH INDICATED.
C. STEEL JOISTS, C-SHAPED, WITH FLANGE WIDTH OF NOT LESS THAN 1-5/8 INCHES, MINIMUM UNCOATED STEEL THICKNESS OF .038 INCH, AND OF DEPTH INDICATED.
D. STEEL TRACK, U-SHAPED, MINIMUM UNCOATED STEEL THICKNESS SAME AS STUDS OR JOISTS WITH TRACK, WITH FLANGE WIDTHS OF 1-1/4 INCHES FOR STUDS AND 1-5/8 INCHES FOR JOISTS, OF WEB DEPTH INDICATED.
2.2 ACCESSORIES
A. ACCESSORIES: FABRICATE FROM THE SAME MATERIAL AND FINISH USED FOR FRAMING MEMBERS; OF MANUFACTURERS STANDARD THICKNESS AND CONTOURING, UNLESS OTHERWISE INDICATED.
B. FASTENING: ANCHOR BOLTS, ASTM F 1554, GRADE 36, THREADED CARBON STEEL HEX-HEADED BOLTS AND CARBON STEEL NUTS; AND FLAT, HARDENED STEEL WASHERS; ZINC COATED BY HOT-DIP PROCESS ACCORDING TO ASTM A 153/A 153M, CLASS C.
C. MECHANICAL FASTENERS: CORROSION-RESISTANT COATED SELF-DRILLING, SELF-THREADING STEEL DRILL SCREWS.
D. INSULATION: ASTM C 645, TYPE 1, UNFACED FIBER-BLENKETS.
E. GALVANIZING REPAIR PAINT: SP-PC/PACT 20 OR DOD-2/P1033.
PART 3 - EXECUTION
3.1 FRAMING AND ACCESSORIES LEVEL, PLUMB, SQUARE, AND TRUE TO LINE, AND SECURELY FASTENED, ACCORDING TO ASTM C 1007, TEMPORARILY BRACE FRAMING UNTIL ENTIRE INTEGRATED SUPPORTING STRUCTURE HAS BEEN COMPLETED AND PERMANENT CONNECTIONS ARE SECURED.
1. CUT FRAMING MEMBERS BY SAWING OR SHEARING; DO NOT TORCH CUT.
2. FASTEN FRAMING MEMBERS BY WELDING OR SCREW FASTENING.
3. FASTEN FRAMING MEMBERS IN BUILT-UP EXTERIOR FRAMING MEMBERS.
4. FASTEN REINFORCEMENT PLATES OVER WEB PENETRATIONS LARGER THAN STANDARD PUNCHED OPENINGS.
5. FASTEN FRAMING MEMBERS TO SUBSTRATE WITH A MAXIMUM VARIATION OF 1/8 INCH IN 10 FEET AND WITH INDIVIDUAL FRAMING MEMBERS NO MORE THAN PLUS OR MINUS 1/8 INCH FROM PLAN LOCATION. CUMULATIVE ERROR SHALL NOT EXCEED MAXIMUM FASTENING REQUIREMENTS OF SHEARING AND BENDING.
C. STUDS: INSTALL CONTINUOUS TOP AND BOTTOM TRACKS SECURELY ANCHORED AT CORNERS AND ENDS, SQUARELY SEAT STUDS AGAINST WEAP TOP AND BOTTOM TRACK. SPACE STUDS AS INDICATED. SET PLUMB, ALIGN, AND FASTEN BOTH FLANGES OF STUDS TO TOP AND BOTTOM TRACKS.
1. INSTALL AND FASTEN TO BOTH STUDS, BRACING IN STUD STUDS, SPACES IN ROWS NOT MORE THAN 48 INCHES APART.
2. DELETE FIRST SUBPARAGRAPH BELOW IF NOT REQUIRED: DIAGONAL BRACING IS USUALLY LIMITED TO SHEAR WALLS.
2. INSTALL STEEL SHEET DIAGONAL BRACING TO BOTH STUDS FLANGES, TERMINATE AT AND FASTEN TO REINFORCED TOP AND BOTTOM TRACK AND ANCHOR TO STRUCTURE.
3. INSTALL MISCELLANEOUS FRAMING AND CONNECTIONS TO PROVIDE A COMPLETE AND STABLE WALL-FRAMING SYSTEM.
4. DELETE SUBPARAGRAPH BELOW IF NON-LOAD-BEARING, CURTAIN WALL FRAMING.
A. ISOLATE NON-LOAD-BEARING, CURTAIN WALL FRAMING FROM BUILDING STRUCTURE USING VERTICAL SLICE CLIPS OR DEFLECTION TRACK TO PREVENT TRANSFER OF LOADS WHILE PROVIDING CLUTTER SUPPORT.
D. JOISTS: INSTALL AND SECURELY ANCHOR PERMETER JOIST TRACK SIDE TO MATCH JOISTS. INSTALL JOISTS BEARING ON SUPPORTING FRAMING, BRACE AND REINFORCE, AND FASTEN TO BOTH JOISTS.
1. INSTALL BRIDGING AND FASTEN BRIDGING AT EACH JOIST INTERSECTION.
2. INSTALL MISCELLANEOUS JOIST FRAMING AND CONNECTIONS, INCLUDING WEB STIFFENERS, CLOSURE PECS, CLIP ANGLES, CONTINUOUS ANGLES, HOLE DOWN ANGLES, ANCHORS, AND FASTENERS.
END OF SECTION 05400

SECTION 05103 - MISCELLANEOUS ROUGH CARPENTRY
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: MODEL CODE EVALUATION REPORTS FOR TREATED WOOD.
PART 2 - PRODUCTS
2.1 MATERIALS
A. LUMBER: PROVIDE DRESSED LUMBER, S4S, MARKED WITH GRADE STAMP OF INSPECTION AGENCY.
1. ALL LUMBER SHALL BE FIRE RETARDANT TREATED UNLESS NOTED OTHERWISE. MEMBERS SHALL BEAR STAMPING VERIFYING THE SAME.
2.2 TREATED MATERIALS
A. PRESERVATIVE TREATMENT METHODS: AWPA C2.
1. KILN DRY LUMBER AFTER TREATMENT TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT.
2. MARK LUMBER WITH TREATMENT QUALITY MARK OF AN INSPECTION AGENCY APPROVED BY THE ALSIC BOARD OF REVIEW.
B. PROVIDE PRESERVATIVE TREATED MATERIALS FOR ALL MISCELLANEOUS ROUGH CARPENTRY UNLESS OTHERWISE INDICATED.
C. FIRE RETARDANT TREATED MATERIALS: COMPLY WITH PERFORMANCE REQUIREMENTS IN AWPA C20.
1. USE INTERIOR TYPE A UNLESS OTHERWISE INDICATED.
2. USE INTERIOR TYPE A, HIGH TEMPERATURE (HT) WHERE INDICATED.
3. USE INTERIOR TYPE A, UNLESS OTHERWISE INDICATED.
D. IDENTIFY WITH APPROPRIATE CLASSIFICATION MARKING OF A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
D. PROVIDE FIRE-RETARDANT TREATED MATERIALS FOR ALL MISCELLANEOUS ROUGH CARPENTRY.
2.3 DIMENSION LUMBER:
A. MAXIMUM MOISTURE CONTENT: 15 PERCENT.
SELECT ONE GRADE REQUIREMENT AND ONE OR MORE SPECIES GROUP IN FIRST TWO SUBPARAGRAPHS BELOW DEPENDING ON AVAILABILITY AND SUITABILITY FOR PROJECT.
SPECIES GROUPS IN FIRST SUBPARAGRAPH BELOW ARE LISTED IN ORDER OF DECREASING STRENGTH (EXTREME FIBER IN BENDING).
SELECT ONE OR MORE SPECIES IN FIRST TWO PARAGRAPHS BELOW DEPENDING ON AVAILABILITY AND SUITABILITY FOR PROJECT.
B. EXPOSED SURFACES: HEAVY GRADE, NO. 1; COMMON: HEAVY, WOOD, OR W/HT 15 PERCENT MAXIMUM MOISTURE CONTENT.
C. CONCEALED BOARDS: EASTERN SPOFTWOOD, NO. 3 COMMON; NELEA, WITH 15 PERCENT MAXIMUM MOISTURE CONTENT.
D. MISCELLANEOUS LUMBER: CONSTRUCTION LUMBER OR NO. 2, GRADE WITH 15 PERCENT MAXIMUM MOISTURE CONTENT OF ANY SPECIES. PROVIDE FOR NAELERS, BLOCKING, AND SIMILAR MEMBERS.
E. 3/4" plywood BACKING PANELS
1. PROVIDE 3/4" ELECTRICAL INSULATION BACKING PANELS: PLYWOOD, EXPOSURE 1, C OR D PLUGGED, FIRE RETARDANT TREATED, NOT LESS THAN 1/2 INCH THICK.
E.5 FASTENERS
A. FASTENERS: SIZE AND TYPE INDICATED, WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, OR IN AREA OF HIGH RELATIVE HUMIDITY. PROVIDE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A 153/A 153M.
1. POWER DRIVEN FASTENERS: C480 WEB-272.
PART 6 - EXECUTION
6.1 INSTALLATION
A. SET MISCELLANEOUS ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB, TRUE TO LINE, CUT, AND FITTED. LOCATE NAELERS, BLOCKING, AND SIMILAR SUPPORTS TO COMPLY WITH REQUIREMENTS FOR ATTACHING OTHER CONSTRUCTION.
B. SECURELY ATTACH MISCELLANEOUS ROUGH CARPENTRY TO SUBSTRATE, COMPLYING WITH THE FOLLOWING:
1. TABLE 2395.2, "FASTENING SCHEDULE," IN NEW JERSEY BC 2004.
END OF SECTION 05103

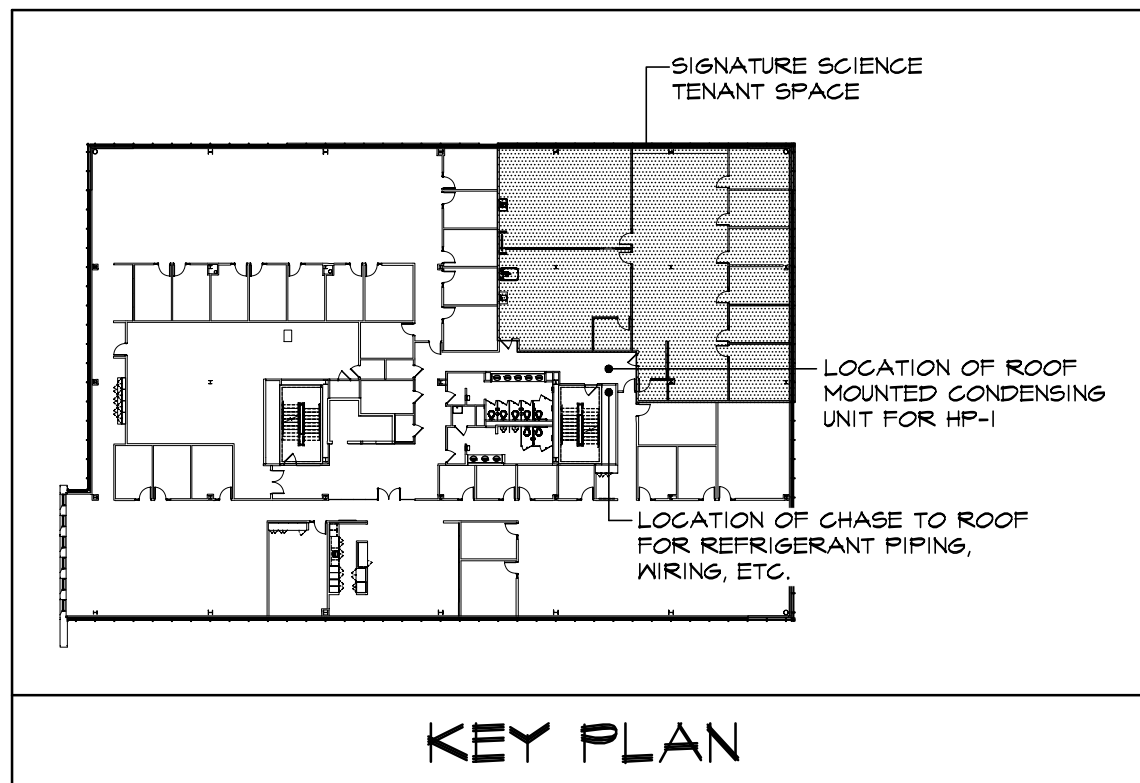
SECTION 06200 - FINISH CARPENTRY
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: SAMPLES FOR HARDWOOD VENEER PLYWOOD PANELING.
PART 2 - PRODUCTS
2.1 MATERIALS
LUMBER: DOC F5 20 AND GRADING RULES OF INSPECTION AGENCIES CERTIFIED BY AMERICAN LUMBER STANDARDS COMMITTEE BOARD OF REVIEW.
D. SOFTWOOD PLYWOOD: DOC F5 1.
D. MDF: ANSI A208.2, GRADE 130, MADE WITH BINDER CONTAINING NO UREA-FORMALDEHYDE RESIN.
PARTICULARS: ANGLE WITH BINDER CONTAINING NO UREA-FORMALDEHYDE RESIN.
F. MELAMINE-FACED PARTICLEBOARD: PARTICLEBOARD COMPLYING WITH ANSI A208.1, GRADE M-2, FINISHED ON BOTH FACES WITH THERMALLY FUSED, MELAMINE-IMPREGNATED DECORATIVE PAPER COMPLYING WITH LMA SA-1.
2.2 EXTERIOR FINISH
A. REFINISH FIRST PARAGRAPH BELOW, SELECT ONE TEXTURE, GRADE, AND SPECIES.
EXTERIOR LUMBER TRIM: SMOOTH FINISH: PREMIUM OR COMMON (STERLING) EASTERN WHITE PINE, EASTERN HEMLOCK-BALSAM FIR, TAMARACK, EASTERN SPRUCE, OR WHITE WOODS.
1. MAXIMUM MOISTURE CONTENT: 19 PERCENT.
CELLULAR PVC EXTERIOR TRIM: EXTRUDED, EXPANDED PVC WITH A SMALL-CELL MICROSTRUCTURE, MADE FROM UV- AND HEAT-STABILIZED, RIGID MATERIAL.
PART 3 - EXECUTION
3.1 AVAILABLE PRODUCTS
C. FOAM PLASTIC MOLDINGS: MOLDED PRODUCT OF SHAPES INDICATED, WITH A TOUCH OUTSIDE SKIN ON EXPOSED SURFACES; FACTORY PRIMED; PRODUCT IS RECOMMENDED BY MANUFACTURER FOR INTERIOR USE.
1. AVAILABLE PRODUCTS
D. PLYWOOD SIDING: APA-RATED SIDING, 1/2-INCH THICK, 303-OL, MEDIUM-DENSITY FIBER, V-GROOVE AT 6 INCHES O.C.
2.3 BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
C. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
2. EXTERIOR DOORS: MODEL 1 (FULL FLUSH, METALLIC-COATED STEEL SHEET FACES).
REMAIN FIRST SUBPARAGRAPH FOR THERMAL-RATED DOORS; VERIFY R-VALUE WITH MANUFACTURERS THERMAL-RESISTANCE VALUE (R-VALUE) OF NOT LESS THAN 4.0 DEG F X H X SQ. FT./BTU WHEN TESTED ACCORDING TO ASTM C 1363.
3. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS.
B. COMPLY WITH ANSIS/A250.8.
C. PRE-RATED DOORS AND FRAMES: LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
C. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS.
B. COMPLY WITH ANSIS/A250.8.
C. PRE-RATED DOORS AND FRAMES: LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
C. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS.
B. COMPLY WITH ANSIS/A250.8.
C. PRE-RATED DOORS AND FRAMES: LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
C. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
PART 1 - GENERAL
1.1 SECTION REQUIREMENTS
A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS.
B. COMPLY WITH ANSIS/A250.8.
C. PRE-RATED DOORS AND FRAMES: LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
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PART 1 - GENERAL
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D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
PART 2 - PRODUCTS
2.1 MATERIALS
A. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1009M, SUITABLE FOR EXPOSED APPLICATIONS.
B. HOT-ROLLED STEEL SHEETS: ASTM A 1011/A 1011M, REPLY TO SHEAR, FITTING, OR CUTTING DEFECTS.
C. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, WITH G60-AL METALLIC COATING.
REMAIN FIRST PARAGRAPH BELOW, DESCRIBING ELECTROLYTIC ZINC-COATED STEEL FOR FRAME ANCHORS ONLY.
D. FRAME ANCHORS: ASTM A 991/A 991M, 40% COATING DESIGNATION: MILL PHOSPHATED.
1. TOP ANCHORS BOLT INTO EXTERIOR WALLS; SHEET STEEL COMPLYING WITH ASTM A 1008/A 1009M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
2. USE CONCEALED FASTENERS FOR ALL FRAMES.
E. INSERS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
2.2 HOLLOW METAL DOORS AND FRAMES
A. PRODUCT:
1. PIONEER DOORS AND FRAMES.
B. DOORS: COMPLYING WITH ANSI 2008 FOR LEVEL AND MODEL, AND ANSI A250.4 FOR PHYSICAL-DURANCE LEVEL INDICATED; 1-3/4 INCHES THICK UNLESS OTHERWISE INDICATED.
FULL FLUSH ALLOWS VISIBLE SEAMS ON EDGES OF DOORS; SEAMLESS DOES NOT.
C. HARDWARE REINFORCEMENT: FABRICATE ACCORDING TO ANSIS/A250.4 WITH REINFORCEMENT PLATES FROM SAME MATERIAL AS DOOR FACE SHEETS.
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A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS.
B. COMPLY WITH ANSIS/A250.8.
C. PRE-RATED DOORS AND FRAMES: LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION BASED ON TESTING PER NFA 252 AT NEUTRAL PRESSURE.
A. HARDS AND EXIT PASSAGeways: PROVIDE DOORS THAT HAVE A TEMPERATURE RISE RATING OF 450 DEG F.
D. SMOKE CONTROL DOOR ASSEMBLIES: COMPLY WITH NFPA 105 OR UL 1784.
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2



MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

LEGEND	
	SUPPLY AIR DUCTWORK
	RETURN AIR DUCTWORK
	NEW DUCTWORK
	EXIST. DUCTWORK TO BE REUSED UNLESS OTHERWISE NOTED
	45° ENTRY TYPE BRANCH TAKEOFF WITH VOLUME DAMPER
	VOLUME DAMPER
	DOOR UNDERCUTTING OR LOUVER
	THERMOSTAT
	CONNECTION POINT BETWEEN NEW AND EXISTING
ABBREVIATIONS	
CFM	CUBIC FEET PER MINUTE
(E)	EXISTING TO REMAIN UNLESS OTHERWISE NOTED
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
NK	NECK SIZE OF AIR TERMINAL
OA	OUTSIDE AIR
MS	WALL GRILLE
MR	WALL RETURN

- NOTES:**
- EXTEND CONDENSATE FROM HEAT PUMP (HP-1) TO MOP SINK LOCATED IN JANITOR-204.
 - LOCATE HP-1 OUTDOOR UNIT ON ROOF, ROUTE REFRIGERANT PIPING INTO EAST CHASE-204, UP THROUGH ROOF.



<p>MPB CONSULTING AND DESIGN LLC REGISTERED PROFESSIONAL ENGINEERING FIRM REGISTERED PROFESSIONAL ENGINEER NO. 74684 REGISTERED PROFESSIONAL ENGINEER NO. 38281 REGISTERED PROFESSIONAL ENGINEER NO. 7054</p>	
<p>MECHANICAL FLOOR PLAN FOR SIGNATURE SCIENCE</p>	
<p>DATE: 9/5/2023 DRAWN BY: BCC CHECKED BY: DJF APPROVED BY: DAL SR.</p>	
<p>MECHANICAL FLOOR PLAN FOR SIGNATURE SCIENCE</p>	
<p>SITUATED AT 600 AVIATION RESEARCH BLVD. EGG HARBOR TOWNSHIP, NJ 08234</p>	
<p>MECHANICAL FLOOR PLAN FOR SIGNATURE SCIENCE</p>	
<p>DATE: 9/5/2023 DRAWN BY: BCC CHECKED BY: DJF APPROVED BY: DAL SR.</p>	
<p>M1</p>	
<p>1 OF 9</p>	

PLUMBING GENERAL NOTES

SCOPE

- THE WORK TO BE PERFORMED UNDER THE PLUMBING PLANS AND SPECIFICATIONS CONSISTS OF FURNISHING ALL MATERIAL AND LABOR FOR THE COMPLETE INSTALLATION OF ALL PLUMBING SYSTEMS. THE WORK SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
 - A. COLD AND HOT WATER SYSTEMS
 - B. DRAINAGE AND VENT SYSTEMS
 - C. INSULATION
- CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID CONFLICT AND TO FACILITATE THE WORK WITHOUT CAUSING UNNECESSARY DELAYS. IMMEDIATELY REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER. ALL CHANGES AND/OR ALTERATIONS REQUIRE REVIEW AND APPROVAL BY THE ENGINEER.
- CONTRACTOR SHALL INSTALL PLUMBING EQUIPMENT IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS AND INSTRUCTIONS.

GENERAL

- ALL DESIGN PROFESSIONALS, CONSULTANTS, CONTRACTORS AND SUB-CONTRACTORS PERFORMING WORK ON THIS PROJECT SHALL BE FULLY RESPONSIBLE FOR THE PROPER PERFORMANCE OF THEIR WORK. COORDINATION WITH OTHER CONSULTANTS AND TRADESPEOPLE MEANS AND METHODS OF CONSTRUCTION, JOB SAFETY AND SECURITY. MPE CONSULTING AND DESIGN LLC, INCLUDING ITS AGENTS AND EMPLOYEES ARE NOT RESPONSIBLE OR LIABLE IN ANY WAY FOR THE ABOVE AND SHALL BE HELD HARMLESS AND INDEMNIFIED BY ALL PARTIES FROM ALL CLAIMS, LOSSES, SUITS, AND LEGAL ACTION WHATSOEVER, ARISING FROM THE PERFORMANCE OF WORK ON THE PROJECT.
- THE CONTRACTOR SHALL EXAMINE ALL EXISTING EQUIPMENT, PIPES, VALVES AND ANCILLARY COMPONENTS TO ENSURE SAFETY AND SUITABILITY FOR CONTINUED USE. IMMEDIATELY REPORT ANY DISCREPANCIES OR DEFICIENCIES TO THE OWNER, GENERAL CONTRACTOR AND ENGINEER'S OFFICE BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL PROVIDE FOR FIELD VERIFICATION AND COORDINATION OF ALL DIMENSIONS AND CONDITIONS PRIOR TO MATERIAL PROCUREMENT AND/OR FABRICATION. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL OTHER TRADES INVOLVED. PROVIDE FOR ALL FIELD MODIFICATIONS SUCH AS OFFSETS IN PIPING AS NEEDED TO AVOID CONFLICT WITH ANY AND ALL OBSTRUCTIONS AND/OR INTERFERENCES THAT MAY AFFECT THE LAYOUT INDICATED ON THESE DRAWINGS. NO ADDITIONAL COST TO THE CONTRACTOR WILL BE GRANTED FOR THIS WORK.
- DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, DIMENSIONS, ETC. AT THE JOB SITE.
- LOCATIONS OF EXISTING EQUIPMENT, PIPING, VENTS, ETC. HAVE BEEN TAKEN FROM BEST AVAILABLE INFORMATION. THE DRAWINGS ARE INTENDED TO BE USED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS NOT TO SCALE DRAWINGS OR ASSUME THAT ALL COMPONENTS ARE SHOWN. HE SHALL VISIT THE SITE TO DETERMINE THE TOTAL EXTENT OF REMOVALS AND NEW WORK AS DIAGRAMMED ON THE PLANS. EXTRA COMPENSATION FOR FAILURE TO COMPLY WITH THE ABOVE STATEMENT WILL NOT BE CONSIDERED.
- THIS CONTRACTOR SHALL COORDINATE ALL WORK WITH A COMPLETE SET OF M/P/E AND ARCHITECTURAL DESIGN DRAWINGS IF APPLICABLE. IMMEDIATELY REPORT ANY DISCREPANCIES TO THE ENGINEER'S OFFICE.
- THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES REQUIRED.
- ALL PLUMBING FIXTURES SHALL BE SEPARATELY VALVED.
- ALL WATER BRANCHES AND RISERS SHALL BE SEPARATELY VALVED.
- CONTRACTOR SHALL MAKE ALL PLUMBING CONNECTIONS REQUIRED TO EQUIPMENT SUPPLIED BY OTHERS.
- CONTRACTOR SHALL PROVIDE AND INSTALL ALL HOT & COLD WATER CONNECTIONS TO THE PLUMBING FIXTURES.
- CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR THE INSTALLATION OF METAL ACCESS DOORS BY MILCOR STYLE "DM" (NON FIRE RATED) OR STYLE "DFR" (1/2 HOUR FIRE RATED) AT ALL LOCATIONS REQUIRED TO ACCESS VALVES, DEVICES, ETC. CONCEALED ABOVE CEILING OR IN WALLS.

CODES AND STANDARDS

- ALL PLUMBING WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE 2021 NEW JERSEY EDITION OF THE NATIONAL STANDARD PLUMBING CODE, ALL LOCAL CODES, AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- THIS CONTRACTOR IS RESPONSIBLE FOR ALL WORK MATERIALS AND LABOR TO SATISFY A COMPLETE AND WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.

BRAND NAMES, STANDARDS OF QUALITY AND PERFORMANCE

- BRAND NAMES AND/OR DESCRIPTIONS USED IN THESE DOCUMENTS ARE TO ACQUAINT THE BIDDERS WITH THE TYPES OF MATERIALS/EQUIPMENT DESIRED AND WILL BE USED AS A STANDARD BY WHICH MATERIALS/EQUIPMENT OFFERED AS EQUIVALENT WILL BE EVALUATED.
- THE LISTED BRANDS SHALL SERVE AS A REFERENCE OR POINT OF COMPARISON FOR FUNCTION OR OPERATIONAL CHARACTERISTICS DESIRED FOR THE MATERIAL/EQUIPMENT BEING REQUESTED. WHERE BIDDER SUBMITS AN EQUIVALENT, IT SHALL BE THE RESPONSIBILITY OF THE BIDDER TO DOCUMENT THE EQUIVALENT CLAIM. FAILURE TO SUBMIT SUCH DOCUMENTATION SHALL BE GROUNDS FOR REJECTION OF THE CLAIM OF EQUIVALENT.
- SUBSTITUTES AND "OR EQUAL" SUBMISSIONS MUST BE APPROVED IN WRITING BY ENGINEER PRIOR TO SUBMISSION OF BID.

SUBMITTALS

- SUBMIT MANUFACTURER'S LITERATURE TO ENGINEER'S OFFICE WHICH INDICATES THAT THE EQUIPMENT MEETS REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS. SUBMITTALS SHALL INCLUDE BUT NOT BE LIMITED TO:
 - HOT WATER HEATER
 - PLUMBING FIXTURES
 - SAFETY SHOWER
 - PIPING AND ACCESSORIES
 - INSULATION

SOIL WASTE AND VENT PIPING

- SOIL WASTE PIPING AND FITTINGS SHALL BE HUBLESS CAST IRON.
- VENT PIPING AND FITTINGS SHALL BE HUBLESS CAST IRON.
- ALL VENT PIPING SHALL HAVE A MINIMUM SLOPE OF 1/4" PER FOOT AND SHALL DRAIN TO FIXTURES.
- ALL WASTE PIPING SHALL SLOPE AS FOLLOWS:
 - 3" AND SMALLER SHALL HAVE A SLOPE OF 1/4" PER FOOT
 - 4" AND LARGER SHALL HAVE A SLOPE OF 1/8" PER FOOT
- FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH 4" DEEP TRAP TRAP SEAL AND RectorSeal SureSeal MODEL #55XX04V INLINE FLOOR DRAIN TRAP SEAL (ASSE 1072).
- DO NOT INSTALL PLASTIC PIPING ABOVE CEILINGS USED AS ENVIRONMENTAL AIR SPACES OR AS OTHERWISE PROHIBITED BY LOCAL CODE. INSTALL HUBLESS CAST IRON OR COPPER PIPE.
- SUPPORT PIPING AT MAXIMUM 4'-0" INTERVALS.

INSULATION

- ALL HOT AND COLD WATER PIPING TO BE INSULATED WITH A MINIMUM OF 1" FIBERGLASS JACKETED INSULATION (ASTM C547, CLASS I) WITH A FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50.

WATER PIPING

- DOMESTIC WATER PIPING SHALL BE TYPE "L" COPPER TUBING ABOVE GROUND OR TYPE "K" BELOW GROUND WITH SOLDERED JOINTS USING LEAD FREE SOLDER, PROPERLY CLEANED, USING AN APPROVED FLUX.
- CONTRACTOR SHALL CONFIRM EXACT LOCATION OF WATER METERING EQUIPMENT WATER SERVICES WITH THE WATER COMPANY.
- SUPPORT PIPING AT MAXIMUM 5'-0" INTERVALS FOR PIPING UP TO 2" AND AT 8'-0" INTERVALS FOR 2 1/2" AND UP.
- DOMESTIC HOT WATER TEMPERATURES SHALL BE AS FOLLOWS:
 - HAND WASHING FACILITIES - 105°F
- PROVIDE POINT OF USE THERMOSTATIC MIXING VALVES AS INDICATED. MAXIMUM SET POINT SHALL BE 105°F.
 - HAND SINKS
- ALL WATER PIPING SHALL BE INSTALLED BELOW BUILDING ENVELOPE INSULATION WITHIN CONDITIONED SPACE. HEAT TRACE WHERE THIS REQUIREMENT CAN NOT BE ACHIEVED. COORDINATE WITH ELECTRICAL CONTRACTOR AND PROVIDE FOR POWER CIRCUIT AS NEEDED.

WATER HEATER

- CONTRACTOR SHALL PROVIDE A BRONZE THERMOSTATIC MIXING VALVE ON ALL WATER HEATERS.
- PROVIDE TEMPERATURE PRESSURE RELIEF VALVE AND DISCHARGE PIPE FOR WATER HEATER.
- PROVIDE VACUUM BREAKER ON COLD WATER SUPPLY TO WATER HEATERS.
- CONTRACTOR SHALL PROVIDE A DRIP PAN FOR ALL WATER HEATERS. METALLIC PANS SHALL BE 24 GAUGE MINIMUM AND NON-METALLIC PANS SHALL BE .0625 INCH MINIMUM THICKNESS. PANS SHALL BE NOT LESS THAN 1 1/2" DEEP. PAN OUTLET SHALL BE 3/4" AND DRAIN TO POINT OF DISCHARGE AS SHOWN ON THE DRAWINGS.

ESCUTCHEONS

- ALL EXPOSED PIPES EXCEPT AS OTHERWISE DESCRIBED PASSING THROUGH WALLS, FLOORS, CEILING, ETC. IN FINISHED SPACES SHALL BE PROVIDED WITH SOLID PATTERN BRASS CHROME PLATED ESCUTCHEONS WITH SET SCREW.

BARRIER FREE REQUIREMENT

- ALL EXPOSED WASTE AND WATER PIPING WITHIN A BARRIER FREE BATHROOM SHALL BE INSULATED WITH A PRODUCT EQUAL TO IPS CORP. "TRUEBRO" LAV GUARD 2 UNDERSINK PROTECTIVE PIPE COVERS WITH INTERNAL, EZ TEAR-TO-FIT TRIM FEATURE FOR SQUARE CLEAN TRIMMING. INTERNAL RIBS AND BUILT-IN, CONCEALED E-Z GRIP FASTENERS (NO CABLE TIE FASTENERS ALLOWED).

FIRESTOP

- PENETRATIONS FOR CABLES, CABLETRAYS, CONDUITS, PIPES, TUBES, COMBUSTION VENTS, AND EXHAUST VENTS, WIRES, AND SIMILAR ITEMS TO ACCOMMODATE ELECTRICAL, MECHANICAL, PLUMBING, AND COMMUNICATIONS SYSTEMS THAT PASS THROUGH A WALL, FLOOR, OR FLOOR/CEILING ASSEMBLY CONSTRUCTED AS A FIRE BARRIER SHALL BE PROTECTED BY A FIRESTOP SYSTEM OR DEVICE. THE FIRESTOP SYSTEM OR DEVICE SHALL BE TESTED IN ACCORDANCE WITH ASTM E 814 OR ANSI / UL 1479.

IDENTIFICATION

- PROVIDE STENCILED PIPE MARKERS OR PLASTIC TAPE WITH COLOR COMPLYING WITH ANSI A181 INCLUDE DIRECTION OF FLOW.
- LOCATE MARKERS NEAR VALVES, EACH BRANCH TAKE OFF AND NEAR MAJOR EQUIPMENT. MAXIMUM SPACE INTERVALS SHALL NOT EXCEED 50'-0".

PLUMBING FIXTURE SCHEDULE									
SYMBOL	TYPE OF EQUIPMENT	MANUF./MODEL #	DRAIN	VTR	HWS	CWS	SFU	DFU	DESCRIPTIONS
SK	SINK	ELKAY #D1121	1 1/2"	1 1/2"	1/2"	1/2"	1.0	1.0	SINGLE BOYL, 22 GAUGE, 1/3 1/2" DRAIN OPENING, 3 FAUCET HOLES, W/ DELTA FAUCET #26C3442
CO	CLEANOUT	ZURN #Z1400	--	--	--	--	--	--	DURA-COATED CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORATED SECURED NICKEL BRONZE TOP
FD	FLOOR DRAIN	ZURN #Z4155	3"	1 1/2"	-	-	-	3.0	DURA-COATED CAST IRON BODY W/ INVERTIBLE MEMBRANE CLAMP, ADJUSTABLE COLLAR AND HEEL-PROOF STRAINER

NOTES:

- FLOOR DRAINS SHALL BE PROVIDED WITH 4" DEEP TRAP TRAP SEAL AND RectorSeal SureSeal MODEL #55XX04V INLINE FLOOR DRAIN TRAP SEAL (ASSE 1072).
- SINK "SK" SHALL BE PROVIDED WITH THE FOLLOWING EYENASH:
 - GUARDIAN DECK MOUNTED "AUTOFLOW" 90° SWIVEL MODEL #91805(X) WITH THERMOSTATIC MIXING VALVE MODEL #66020. RIGHT/LEFT HAND MOUNT BY OWNER.

HOT WATER HEATER SCHEDULE							
SYMBOL	MANUFACTURER/ MODEL #	CAPACITY (GALLON)	GALLON RECOVERY @ 100°F RISE	WATTS	VOLT	PHASE	REMARKS
HWH-1	BRADFORD WHITE LE102B-1	10	6	1500	120	1	LIGHT DUTY COMMERCIAL UTILITY ELECTRIC WATER HEATER

NOTE:

- PLUMBING CONTRACTOR SHALL PROVIDE HOLDRITE OR EQUAL # 5WHP-N WALL MOUNTING BRACKET AND HARDWARE.
- PROVIDE T&P VALVE AND DISCHARGE PIPING

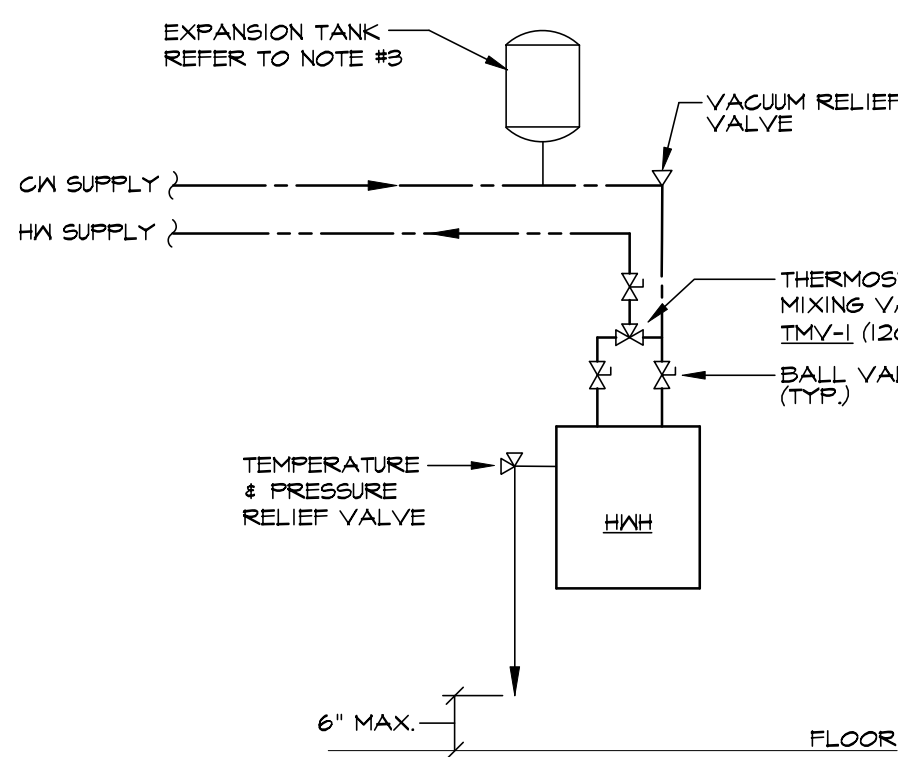
THERMOSTATIC MIXING VALVE SCHEDULE							
SYMBOL	MANUFACTURER/ MODEL #	TEMPERATURE RANGE	TEMPERATURE SETPOINT	MAXIMUM PRESSURE (PSI)	MAX. FLOW (GPM)	MIN. FLOW (GPM)	REMARKS
TMV-1	LEONARD TM-26-BDT-LF	90°F-140°F	120°F	125	26.0	1.0	LOCKABLE SETTING CSA, ASSE AGENCY APPROVAL.
TMV-2	LEONARD 170A-LF-BP-BRKT-CP	95°F-120°F	105°F	125	4.0	0.25	LOCKABLE SETTING CSA, ASSE AGENCY APPROVAL.

SAFETY STATION SCHEDULE

HUGHES SAFETY EMERGENCY TANK SHOWER WITH INTEGRAL EYE/FACE WASH MODEL #051200, 31T GALLONS, 17KW HEATER, 110V, 1Ø, ANSI COMPLIANT

NOTES:

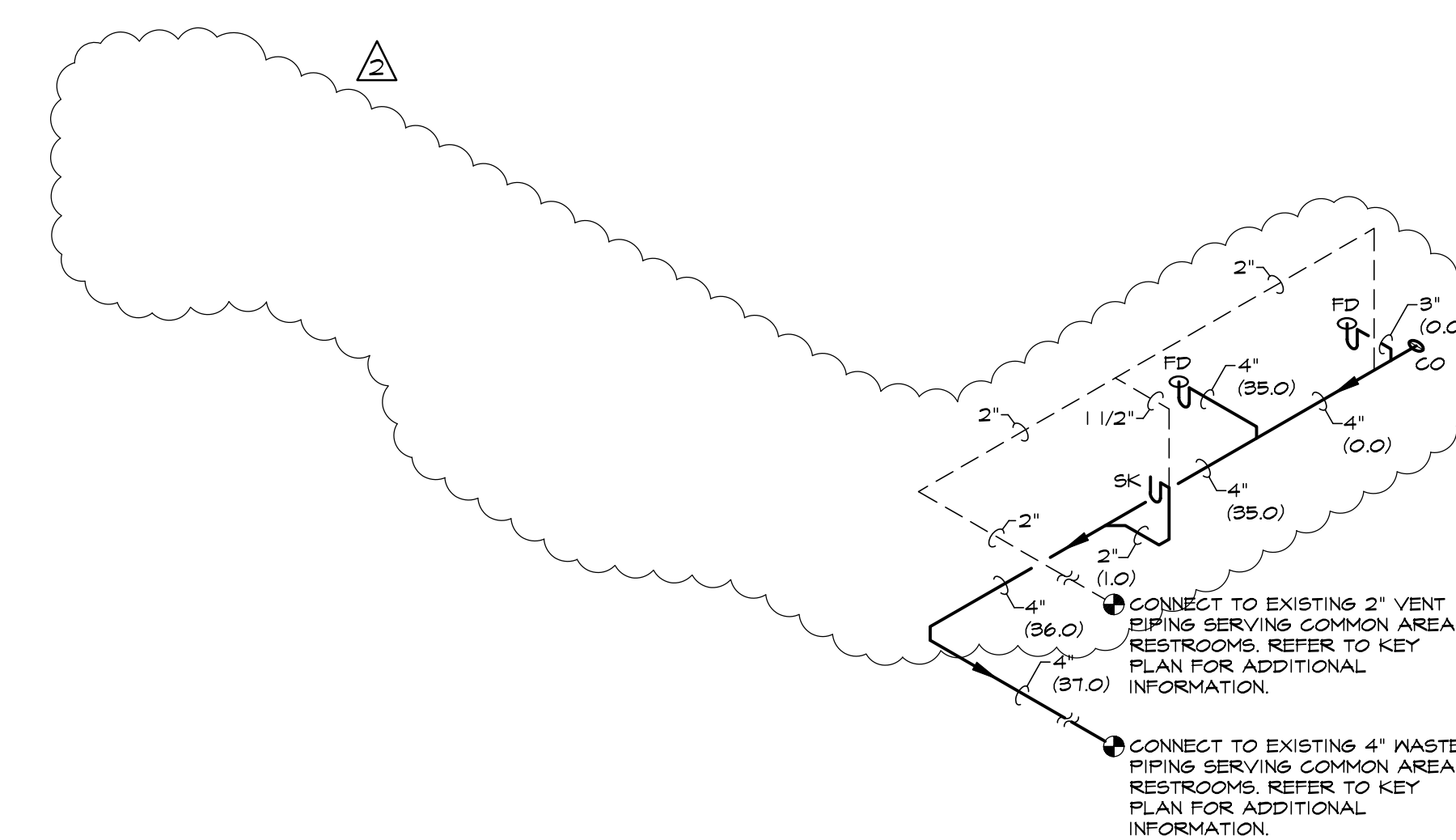
- INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN REQUIREMENTS.
- LISTED MANUFACTURE TO ESTABLISH BASIS OF DESIGN. APPROVED EQUAL IS ACCEPTABLE.



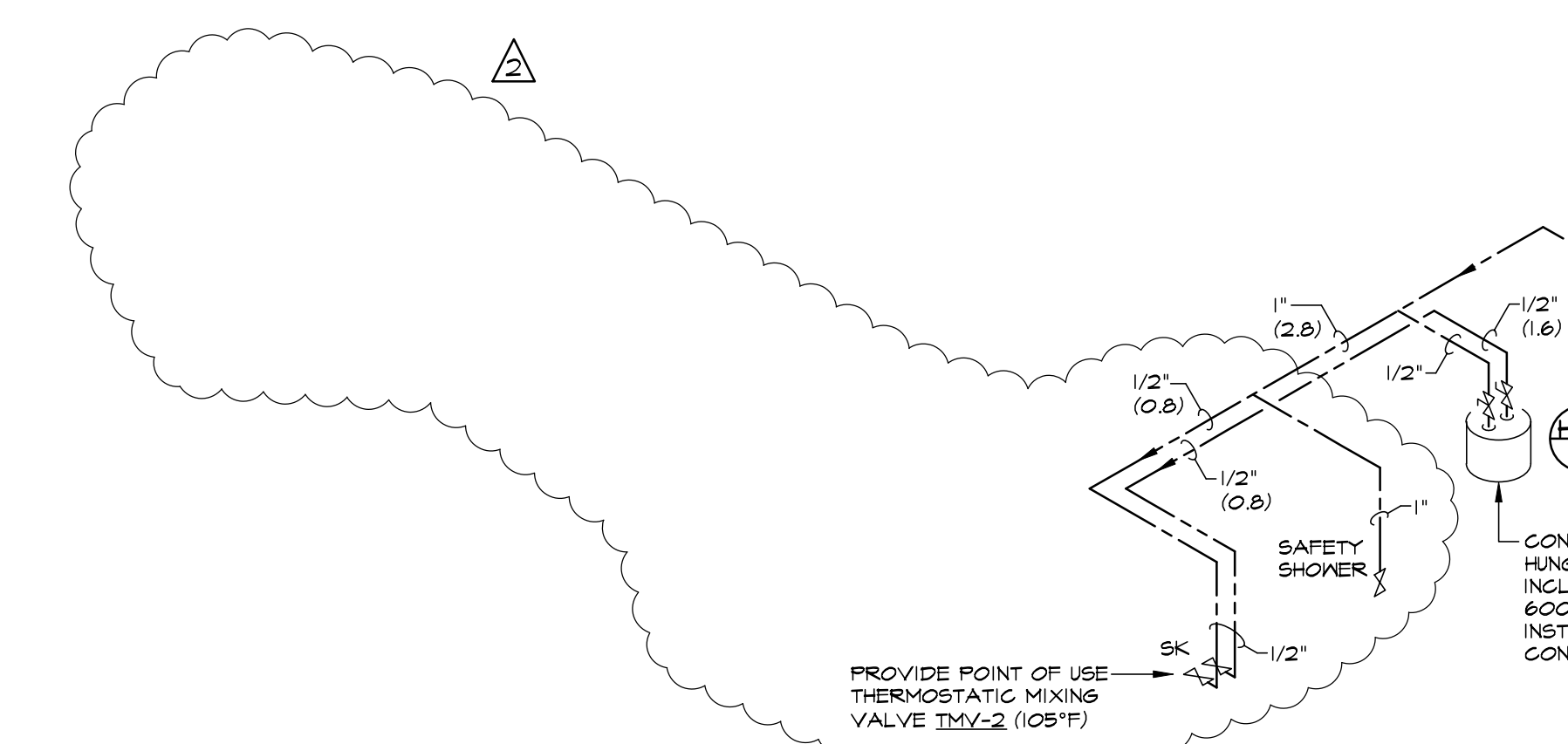
NOTE:

- PLUMBING CONTRACTOR SHALL PROVIDE HOLDRITE WALL HUNG PLATFORM MODEL #50-SWHP-N INCLUDING HANGER RODS AND HARDWARE, 600 LB. LOAD RATING. COORDINATE INSTALLATION/BLOCKING WITH GENERAL CONTRACTOR.
- CONTRACTOR SHALL PROVIDE A DRIP PAN FOR ALL WATER HEATERS. METALLIC PANS SHALL BE 24 GAUGE MINIMUM AND NON-METALLIC PANS SHALL BE .0625 INCH MINIMUM THICKNESS. PANS SHALL BE NOT LESS THAN 1 1/2" DEEP AND SUFFICIENT SIZE TO HOLD THE HEATER WITHOUT INTERFERING DRAIN VALVES, BURNERS, CONTROLS AND ANY REQUIRED ACCESS.
- PLUMBING CONTRACTOR SHALL VERIFY EXISTENCE OF CHECK VALVE ON WATER SUPPLY. IF CHECK VALVE DOESN'T EXIST, EXPANSION TANK MAY BE OMITTED.

WATER HEATER DETAIL
N.T.S.



WASTE PIPING RISER DIAGRAM
N.T.S.



WATER PIPING RISER DIAGRAM
N.T.S.

PLUMBING SCHEDULES, DIAGRAMS AND NOTES

FOR
SIGNATURE SCIENCE

SITUATED AT
600 AVIATION RESEARCH BLVD.
EGG HARBOR TOWNSHIP, NJ 08234

SCALE: AS NOTED
DATE: 9/5/2023
DRAWN BY: BCC
CHECKED BY: DJF
APPROVED BY: DAL SR.

MPB Consulting and Design LLC
Certificate of Authorization No. 24G22225300
1035 N. Black Horse Pike, Suite 3
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Plumbing
Electrical
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Fire Protection

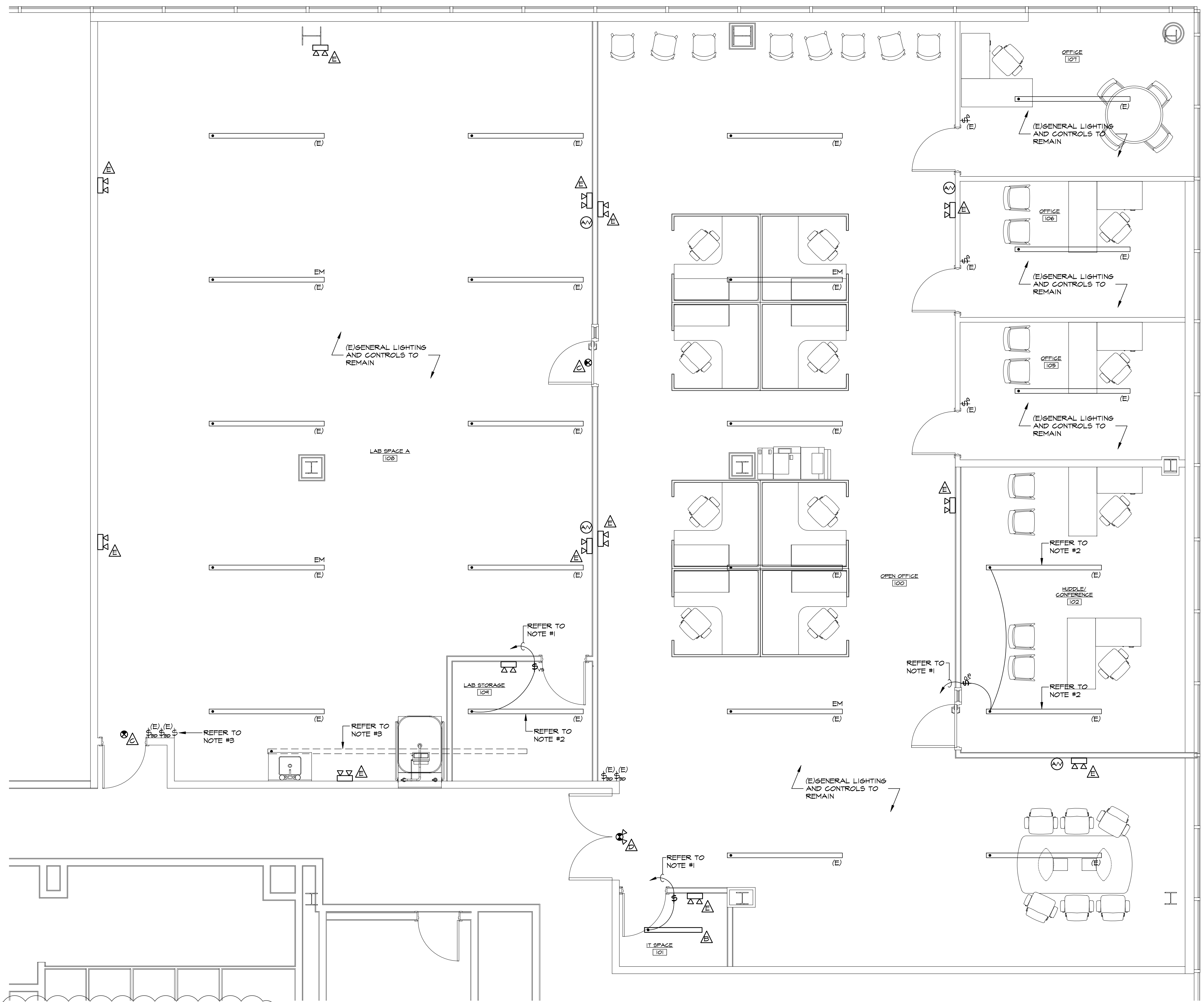
MPE CONSULTING AND DESIGN LLC
REGISTERED PROFESSIONAL ENGINEER NO. 36890
REGISTERED PROFESSIONAL ENGINEER NO. 36891
REGISTERED PROFESSIONAL ENGINEER NO. 36892
REGISTERED PROFESSIONAL ENGINEER NO. 7054

9/5/2023 - REVIEW/COORDINATION
9/24/2023 - REVIEW/COORDINATION
9/25/2023 - BIDDING
9/27/2023 - ADDENDUM NO. 1
1/10/2023 - VALUE ENGINEERING

Daniel A. Loveland Sr., P.E.
Lead P.E.

DATE: _____

P2
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LIGHTING FLOOR PLAN
SCALE: 1/4" = 1'-0"

LEGEND	
	SPECIFICATION GRADE DUPLEX RECEPTACLE
	SPECIFICATION GRADE GROUND FAULT INTERRUPTER
	SPECIFICATION GRADE QUAD RECEPTACLE
	SPECIFICATION GRADE UNDER FLOOR QUAD RECEPTACLE
	JUNCTION BOX
	SPECIFICATION GRADE SINGLE POLE SWITCH
	SPECIFICATION GRADE 3-WAY TOGGLE SWITCH
	WALL SWITCH VACANCY SENSOR
	WALL SWITCH DIMMING VACANCY SENSOR
	LIGHTING FIXTURE (TYPE 'X' SEE SCHEDULE)
	MOTOR
	EMERGENCY FIXTURE
	EXIT SIGN
	COMBINATION EXIT/EMERGENCY FIXTURE
	PANEL
	AUDIBLE/VISUAL ALARM DEVICE
	VISUAL ALARM DEVICE
	TELEPHONE JACK
	DATA OUTLET
	EXHAUST FAN
	EXISTING TO REMAIN UNLESS OTHERWISE NOTED
	UNDER FLOOR

- NOTES:**
- CONNECT TO (E)2#12 WITH GROUND LIGHTING CIRCUIT SERVING THIS AREA.
 - EXISTING LIGHT FIXTURE TO BE DISCONNECTED FROM EXISTING SWITCHED LIGHTING CIRCUIT AND CONNECTED TO NEW LIGHTING CONTROL AS INDICATED. PROVIDE FOR CONTINUATION OF (E)2#12 WITH GROUND WIRING TO MAINTAIN EXISTING LIGHTING CIRCUIT UNINTERRUPTED.
 - WIRING SHALL BE 2#12 WITH GROUND
 - ALL SPLICE SHALL BE MADE IN AN APPROVED, ACCESSIBLE JUNCTION BOX.
 - EXISTING LIGHT FIXTURE CONTROL WIRING AND ANCILLARY COMPONENTS TO BE COMPLETELY DEMOLISHED.
 - PROPERLY TERMINATE CIRCUIT IN AN APPROVED, ACCESSIBLE JUNCTION BOX.
 - PROVIDE BLANK COVER PLATE.

LIGHTING CONTROL SCHEDULE	
	LEVITON WALL SWITCH PIR VACANCY SENSOR MODEL #0DS15-IDX. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIGURING SENSOR TO OPERATE IN VACANCY MODE
	LEVITON DIMMING WALL SWITCH PIR VACANCY SENSOR MODEL #0DD10-IDX
NOTES:	
1. CONTRACTOR SHALL PROVIDE ALL NECESSARY RELAYS, POWER PACKS, ETC. FOR A COMPLETE AND OPERATIONAL SYSTEM.	
2. INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.	
3. VACANCY SENSOR CONTROL LIGHTING SHALL BE AUTOMATICALLY SHUT OFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.	

LIGHTING FIXTURE SCHEDULE								
FIXTURE	MANUFACTURER	MODEL No.	LAMPS		VOLTAGE	TYPE	MOUNTING	REMARKS
			No.	WATTS				
	NOT USED							
	METALUX	4#BL-LD2-45-UV-L895-CD1-U	1	40	120	LED	PENDANT	41-NAVESTREAM-LED LINEAR 3500K, 4502 LUMENS
	LIGHTALARMS	GLXN500RN	1	3	120	LED	SURFACE	UNIVERSAL MOUNT, EXIT SIGN, WITH BATTERY BACKUP, RED LETTERS
	LIGHTALARMS	LCACR250LED	2	1	120	LED	SURFACE	COMBO EXIT/EMERGENCY LTS, WITH REMOTE CAPABILITY
	LIGHTALARMS	LCAB-250LED	2	1	120	LED	SURFACE	EMERGENCY LTS

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MPB
 Electrical
 Mechanical
 Plumbing
 Fire/Alarm
 Security

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 Certificate of Authorization No. 240A28225300
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AS NOTED
 DATE: 9/5/2023
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LIGHTING FLOOR PLAN
 FOR
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PANEL No. (E)FPS		LOCATION: 3RD FLR ELEC ROOM				VOLTAGE: 120/208V				
FRAME RATING: 150 AMP		MAIN BKR. RATING: 150 AMP				PHASE: 3Ø, 4W				
DESCRIPTION: EXISTING - SIEMENS FED WITH 4#1/0 W/ GND FROM A 3 POLE, 150A CIRCUIT BREAKER										
SIZE		CIRCUIT DESCRIPTION		LOAD		CIRCUIT DESCRIPTION		SIZE		
B	W							B	W	
20	12	(E)FVAV 1 FAN POWERED VAV DEV	700	1	2	667	(E)EXHAUST FAN 3-3	20	12	
20	12	(E)FVAV 2 FAN POWERED VAV DEV	700	3	4	1334	(E)EXHAUST FAN 3-1, 3-2	20	12	
20	12	(E)FVAV 3 FAN POWERED VAV DEV	700	5	6	---	SPACE	---	---	
20	12	(E)VAV-1, VAV-2, VAV-3 DEVICES	300	7	8	984	LIGHTS	20	12	
20	12	(E)THUNDERBOLT REC	800	9	10	1548	LIGHTS	20	12	
20	12	(E)THUNDERBOLT REC	800	11	12	---	SPARE	20	12	
20	12	(E)THUNDERBOLT REC	800	13	14	1600	(E)UNKNOWN	20	12	
20	12	(E)THUNDERBOLT REC	800	15	16	---	(E)SPACE	---	---	
20	12	(E)THUNDERBOLT REC	800	17	18	---	(E)SPACE	---	---	
20	12	(E)THUNDERBOLT REC	800	19	20	---	(E)SPACE	---	---	
20	12	(E)THUNDERBOLT REC	800	21	22	1000	SUBPANEL 'PA'	50	6	
20	12	(E)THUNDERBOLT REC	800	23	24	---	---	---	---	
---	---	(E)SPACE	---	25	26	8200	SUBPANEL 'PB'	50	6	
---	---		---	27	28	---	---	---	---	
---	---		---	29	30	---	(E)SPACE	---	---	
---	---		---	31	32	---	---	---	---	
---	---		---	33	34	---	---	---	---	
---	---		---	35	36	---	---	---	---	
---	---		---	37	38	---	---	---	---	
---	---		---	39	40	---	---	---	---	
---	---		---	41	42	---	---	---	---	
TOTAL CONNECTED LOAD (KW)			8.8	30.1	21.3	TOTAL CONNECTED LOAD (KW)				

ELECTRIC LOAD SUMMARY

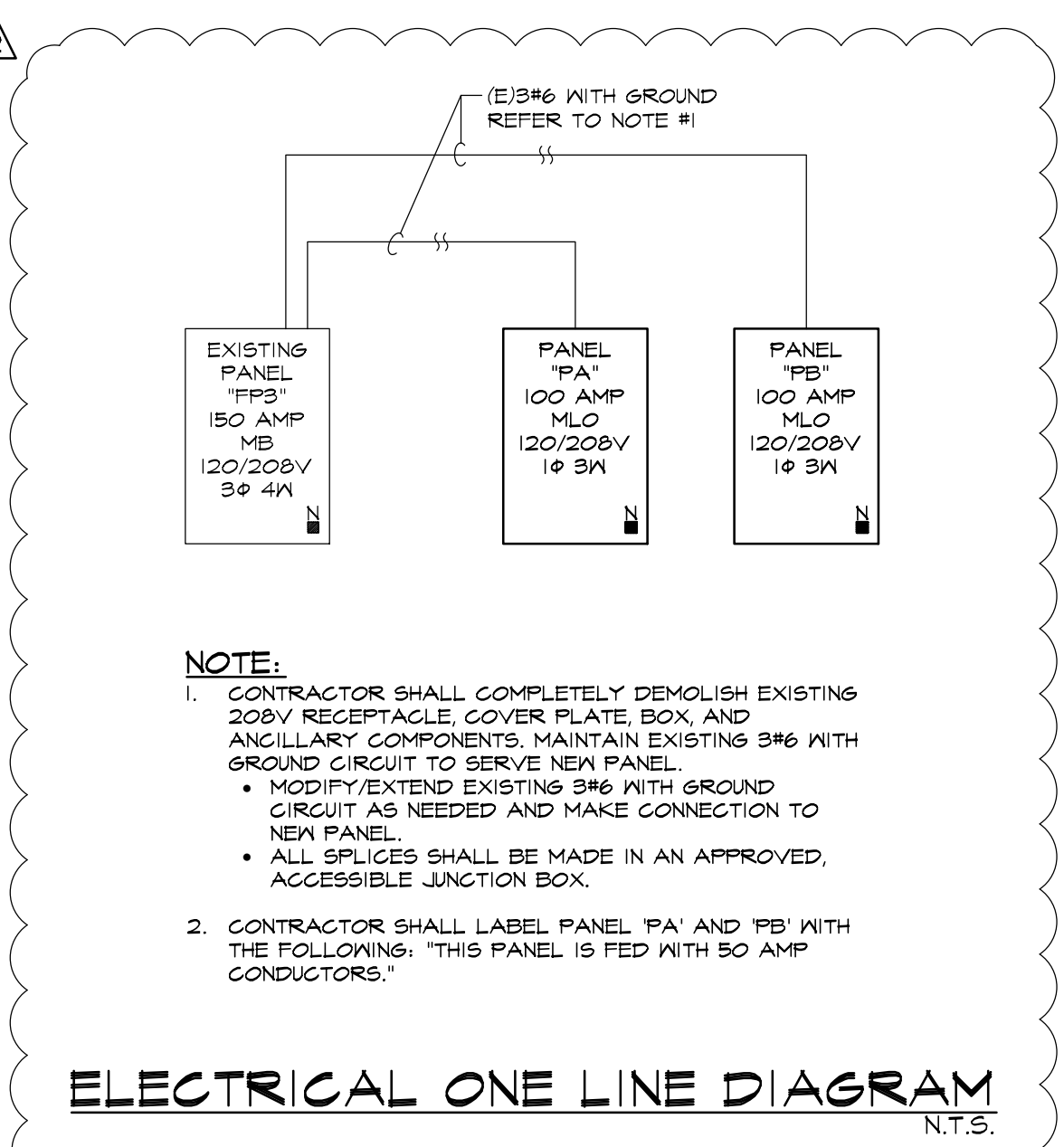
RECEPTACLE LOAD
TOTAL = 16.8 KW
1ST 10% @ 100% = 1.68 KW
BALANCE 6.8 KW @ 50% = 3.4 KW
OTHER @ 100% = 1.9 KW
TOTAL DEMAND = 26.7 KW
26.7 KW X 1000/208V/1.73 = 74.1 AMPS X 125% = 42.7 AMPS

- *NOTE:**
- REUSE EXISTING BRANCH CIRCUIT TO FEED NEW SUBPANEL AS INDICATED. REFER TO ELECTRICAL ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
 - PROVIDE NEW TYPED PANEL DIRECTORY TO REFLECT AS-BUILT CONDITIONS.
 - EXISTING LIGHTING CIRCUIT TO BE REUSED TO FEED NEW LIGHT FIXTURES AS INDICATED ON PLAN.
 - LABEL LABEL JUNCTION BOX AND PANEL SCHEDULE 'SPARE'.
 - TURN CIRCUIT BREAKER TO THE 'OFF' POSITION.
 - EXISTING LIGHTING CIRCUIT MADE OBSOLETE BY THE NEW WORK. TERMINATE CIRCUIT IN AN APPROVED JUNCTION BOX LOCATED IN THE TENANT SPACE.
 - LABEL LABEL JUNCTION BOX AND PANEL SCHEDULE 'SPARE'.
 - TURN CIRCUIT BREAKER TO THE 'OFF' POSITION.

PANEL No. PA		LOCATION: OPEN OFFICE				VOLTAGE: 120/208V				
FRAME RATING: 100 AMPS		MAIN BKR. RATING: MLO				PHASE: 1Ø 3W				
DESCRIPTION: 50 'D' CO., QO SERIES, W/GRD BAR KIT AND LOCKABLE COVER SERIES RATED COMBINATION PANEL										
SIZE		CIRCUIT DESCRIPTION		LOAD		CIRCUIT DESCRIPTION		SIZE		
B	W							B	W	
20	12	IT CLOSET QUAD	360	1	2	180	COPIER	20	12	
20	12	IT CLOSET QUAD	360	3	4	900	OPEN OFFICE RECEPTACLE	20	12	
20	12	OPEN OFFICE RECEPTACLE	720	5	6	540	CONFERENCE ROOM RECEPTACLE	20	12	
20	12	OFFICE RECEPTACLE	720	7	8	360	OFFICE RECEPTACLE	20	12	
20	12	OFFICE RECEPTACLE	360	9	10	360	OFFICE RECEPTACLE	20	12	
20	12	OFFICE RECEPTACLE	540	11	12	180	VAV #1 CONTROLLER	---	---	
20	12	HP4 OUTDOOR UNIT	1440	13	14	---	SPACE	---	---	
20	12	-----	---	15	16	---	SPACE	---	---	
---	---	SPACE	---	17	18	---	SPACE	---	---	
---	---	SPACE	---	19	20	---	SPACE	---	---	
---	---	SUBPANEL 'PA'	---	21	22	---	---	---	---	
---	---	---	---	23	24	---	---	---	---	
---	---	---	---	25	26	---	---	---	---	
---	---	---	---	27	28	---	---	---	---	
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---	---	---	---	37	38	---	---	---	---	
---	---	---	---	39	40	---	---	---	---	
---	---	---	---	41	42	---	---	---	---	
TOTAL CONNECTED LOAD (KW)			4.5	7.0	2.5	TOTAL CONNECTED LOAD (KW)				

ELECTRIC LOAD SUMMARY

TOTAL CONNECTED = 7.0 KW
7.0 KW X 1000/208V = 33.6 AMPS X 125% = 42.0 AMPS



- NOTE:**
- CONTRACTOR SHALL COMPLETELY DEMOLISH EXISTING 208V RECEPTACLE, COVER PLATE, BOX, AND ANCHORAGE COMPONENTS. MAINTAIN EXISTING 3Ø WITH GROUND CIRCUIT TO SERVE NEW PANEL.
 - MODIFY/EXTEND EXISTING 3Ø WITH GROUND CIRCUIT AS NEEDED AND MAKE CONNECTION TO NEW PANEL.
 - ALL SPLICES SHALL BE MADE IN AN APPROVED, ACCESSIBLE JUNCTION BOX.
 - CONTRACTOR SHALL LABEL PANEL 'PA' AND 'PB' WITH THE FOLLOWING: 'THIS PANEL IS FED WITH 50 AMP CONDUCTORS.'

PANEL No. PB		LOCATION: LAB SPACE A				VOLTAGE: 120/208V				
FRAME RATING: 100 AMPS		MAIN BKR. RATING: MLO				PHASE: 1Ø 3W				
DESCRIPTION: 50 'D' CO., QO SERIES, W/GRD BAR KIT AND LOCKABLE COVER SERIES RATED COMBINATION PANEL										
SIZE		CIRCUIT DESCRIPTION		LOAD		CIRCUIT DESCRIPTION		SIZE		
B	W							B	W	
20	12	CUBICAL POWER	1600	1	2	1600	CUBICAL POWER	20	12	
20	12	-----	---	3	4	---	---	---	---	
20	12	HWH	1800	5	6	360	LAB SPACE A RECEPTACLE	20	12	
20	12	SAFETY SHOWER	1700	7	8	720	LAB SPACE A RECEPTACLE	20	12	
---	---	SPACE	---	9	10	720	LAB SPACE B RECEPTACLE	20	12	
---	---	SPACE	---	11	12	---	SPACE	---	---	
---	---	SPACE	---	13	14	---	SPACE	---	---	
---	---	SPACE	---	15	16	---	SPACE	---	---	
---	---	SPACE	---	17	18	---	SPACE	---	---	
---	---	SPACE	---	19	20	---	SPACE	---	---	
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---	---	---	---	39	40	---	---	---	---	
---	---	---	---	41	42	---	---	---	---	
TOTAL CONNECTED LOAD (KW)			4.8	8.2	3.4	TOTAL CONNECTED LOAD (KW)				

ELECTRIC LOAD SUMMARY

TOTAL CONNECTED = 8.2 KW
8.2 KW X 1000/208V = 34.4 AMPS X 125% = 49.2 AMPS

ELECTRICAL GENERAL NOTES

- SCOPE**
- CONTRACTOR SHALL PROVIDE ALL POWER, LIGHTING, FIRE PROTECTION, ETC. AS INDICATED ON THESE DOCUMENTS AND AS OTHERWISE REQUIRED TO SATISFY COMPLETE AND OPERATIONAL SYSTEMS AS INTENDED.
 - CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID CONFLICT AND TO FACILITATE THE WORK WITHOUT UNNECESSARY DELAYS. IMMEDIATELY REPORT ANY DISCREPANCIES, IN WRITING, TO THE ENGINEER. ALL CHANGES AND/OR ALTERATIONS REQUIRE REVIEW AND APPROVAL BY THE ENGINEER.
- GENERAL**
- ALL DESIGN PROFESSIONALS, CONSULTANTS, CONTRACTORS AND SUB-CONTRACTORS PERFORMING WORK ON THIS PROJECT SHALL BE FULLY RESPONSIBLE FOR THE PROPER PERFORMANCE OF THEIR WORK. COORDINATION WITH OTHER CONSULTANTS AND TRADESPEOPLE MEANS AND METHODS OF CONSTRUCTION, JOB SAFETY AND SECURITY. MPE CONSULTING AND DESIGN LLC INCLUDING ITS AGENTS AND EMPLOYEES ARE NOT RESPONSIBLE OR LIABLE IN ANY WAY FOR THE ABOVE AND SHALL BE HELD HARMLESS AND INDEMNIFIED BY ALL PARTIES FROM ALL CLAIMS, LOSSES, SUITS, AND LEGAL ACTION WHATSOEVER, ARISING FROM THE PERFORMANCE OF WORK ON THE PROJECT.
 - CONTRACTOR SHALL EXAMINE EXISTING ELECTRICAL EQUIPMENT, DEVICES AND WIRING TO ASSURE SAFETY AND SUITABILITY FOR CONTINUED USE. IMMEDIATELY REPORT ANY DISCREPANCIES OR DEFICIENCIES TO THE OWNER, GENERAL CONTRACTOR AND ENGINEER'S OFFICE BEFORE PROCEEDING WITH THE WORK.
 - CONTRACTOR SHALL PROVIDE FOR FIELD VERIFICATION AND COORDINATION OF ALL DIMENSIONS AND CONDITIONS PRIOR TO MATERIAL PROCUREMENT AND/OR FABRICATION. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL OTHER TRADES INVOLVED. PROVIDE FOR ALL FIELD MODIFICATIONS SUCH AS OFFSETS IN CONDUIT AS NEEDED TO AVOID CONFLICT WITH ANY AND ALL OBSTRUCTIONS AND/OR INTERFERENCES THAT MAY AFFECT THE LAYOUT INDICATED ON THESE DRAWINGS. NO ADDITIONAL COST TO THE CONTRACTOR WILL BE GRANTED FOR THIS WORK.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL AND LABOR TO SATISFY A COMPLETE AND WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
 - THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES REQUIRED.
 - CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS IN THE BID DOCUMENTS AND WORK PERFORMED BY OTHERS. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING COMPLETE AND OPERATIONAL SYSTEMS IN ACCORDANCE WITH PERFORMANCE REQUIREMENTS.
 - CONTRACTOR TO CONFIRM EXACT LOCATION OF EXISTING AND NEW EQUIPMENT WITH OWNER'S ASSETS.
 - CONTRACTOR TO MAKE ALL ELECTRICAL CONNECTIONS TO EQUIPMENT SUPPLIED BY OTHERS.
 - DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, DIMENSIONS, ETC. AT THE JOB SITE.
 - THE BRANCH CIRCUITS FEEDING THE EMERGENCY FIXTURES SHALL ORIGINATE FROM THE SAME BRANCH CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE SAME AREA AND CONNECTED AHEAD OF ANY SWITCHES.
 - RELOCATE EXISTING CIRCUITS AS REQUIRED.
 - CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE FIRE DETECTION SYSTEM.
 - LIGHT FIXTURES INSTALLED IN SUSPENDED CEILING SHALL BE INDEPENDENTLY SUPPORTED FROM BUILDING STRUCTURE.
 - LOCATIONS OF EXISTING EQUIPMENT, INCLUDING EXHAUST FANS, LIGHTING, RECEPTACLES, PANELS AND SWITCHES HAVE BEEN TAKEN FROM THE BEST AVAILABLE INFORMATION. THE DRAWINGS ARE INTENDED TO BE USED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS NOT TO SCALE DRAWINGS OR ASSUME THAT ALL EQUIPMENT IS SHOWN. HE SHALL VISIT THE SITE TO DETERMINE THE TOTAL EXTENT OF REMOVALS AND NEW WORK AS DIAGRAMMED ON THE PLANS. EXTRA COMPENSATION FOR FAILURE TO COMPLY WITH THE ABOVE STATEMENTS WILL NOT BE CONSIDERED.
 - CONTRACTOR SHALL REFER TO ALL DRAWINGS FOR INFORMATION, SPECIFICATIONS, AND/OR INSTRUCTIONS RELATIVE TO THE PROJECT SCOPE OF WORK.
 - THIS CONTRACTOR SHALL COORDINATE ALL WORK WITH A COMPLETE SET OF M/PE AND ARCHITECTURAL DESIGN DRAWINGS. IMMEDIATELY REPORT ANY DISCREPANCIES TO THE ENGINEER'S OFFICE.
- CODES AND STANDARDS**
- ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN IN STRICT COMPLIANCE WITH THE 2020 NATIONAL ELECTRICAL CODE, 2021 NEW JERSEY EDITION OF THE INTERNATIONAL BUILDING CODE, NFPA 72, NJAC 5:23-3.16, STATE LAWS, LOCAL CODES, AND ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
- BRAND NAMES, STANDARDS OF QUALITY AND PERFORMANCE**
- BRAND NAMES AND/OR DESCRIPTIONS USED IN THESE DOCUMENTS ARE TO ACQUAINT THE BIDDERS WITH THE TYPES OF MATERIALS/EQUIPMENT DESIRED AND WILL BE USED AS A STANDARD BY WHICH MATERIALS/EQUIPMENT OFFERED AS EQUIVALENT WILL BE EVALUATED.
 - THE LISTED BRANDS SHALL SERVE AS A REFERENCE OR POINT OF COMPARISON FOR FUNCTION OR OPERATIONAL CHARACTERISTICS DESIRED FOR THE MATERIAL/EQUIPMENT BEING REQUESTED. WHERE BIDDER SUBMITS AN EQUIVALENT, IT SHALL BE THE RESPONSIBILITY OF THE BIDDER TO DOCUMENT THE EQUIVALENT CLAIM. FAILURE TO SUBMIT SUCH DOCUMENTATION SHALL BE GROUNDS FOR REJECTION OF THE CLAIM OF EQUIVALENT.
 - SUBSTITUTES AND 'OR EQUAL' SUBMISSIONS MUST BE APPROVED IN WRITING BY ENGINEER PRIOR TO SUBMISSION OF BID.
- SUBMITTALS**
- SUBMIT MANUFACTURER'S LITERATURE TO ENGINEER'S OFFICE WHICH INDICATES THAT THE EQUIPMENT MEETS REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS. SUBMITTALS SHALL INCLUDE BUT NOT BE LIMITED TO:
 - LIGHTING FIXTURES
 - FIRE ALARM SYSTEM
 - LIGHTING CONTROLS
 - DEVICES AND COVER PLATES

- WIRING METHOD**
- WIRING METHOD SHALL BE TYPE MC UNLESS OTHERWISE NOTED.
 - OUTDOOR EXPOSED - IMC
 - OUTDOOR CONNECTION TO VIBRATING EQUIPMENT - LIQUIDTIGHT FLEXIBLE CONNECTION
 - INDOOR EXPOSED - ENT
 - INDOOR CONNECTION TO VIBRATING EQUIPMENT - FLEXIBLE METAL CONDUIT
 - UNLESS OTHERWISE NOTED NO WIRE SHALL BE SMALLER THAN #12 AWG, EXCEPT CONTROL AND SIGNAL CIRCUITS MAY BE RUN WITH #14 AWG. NO CONDUIT SHALL BE SMALLER THAN 3/4" ELECTRICAL TRADE SIZE.
 - HOME RUN CIRCUITS MORE THAN 75 FEET FROM THE PANEL BOARD SHALL BE MADE WITH #10 AWG. OR LARGER AS REQUIRED TO LIMIT VOLTAGE DROP TO 2% MAXIMUM.
 - ALL CONDUCTORS SHALL BE XHHW-2 COPPER W/90°C INSULATION OR GREATER.
 - FIRE ALARM CABLE SHALL BE FPLP - SHIELDED, PLENUM RATED, POWER-LIMITING.
- DEMOLITION**
- CONTRACTOR IS RESPONSIBLE FOR SELECTIVE DEMOLITION IN ALL AREAS AS REQUIRED TO ACCOMMODATE THE PROJECT SCOPE OF WORK. ALL SYSTEMS AND ANCHORAGE COMPONENTS MADE OBSOLETE SHALL BE COMPLETELY REMOVED AND DISPOSED. INSTALL BY-PASS WHERE REQUIRED TO MAINTAIN THE INTEGRITY OF OVERALL SYSTEMS REMAINING AND SERVING AREAS OUTSIDE THE SCOPE OF WORK AREA.
 - CONTRACTOR SHALL PERFORM A SITE INSPECTION TO ESTABLISH EXTENT OF DEMOLITION PRIOR TO BID.
- ELECTRICAL EQUIPMENT IDENTIFICATION**
- INSTALL ENGRAVED PLASTIC LAMINATE SIGN ON EACH MAJOR ITEM OF ELECTRICAL EQUIPMENT INDICATING THE EQUIPMENT'S DESIGNATION AND AREA/SUITE SERVED.
 - ALL SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS SUPPLIED BY FEEDER(S) SHALL BE PERMANENTLY MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATED. THE LABEL SHALL BE PERMANENTLY AFFIXED, OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED, AND NOT HANDWRITTEN.
- BOXES AND DEVICES**
- ALL DEVICES SHALL BE 20 AMP UNLESS OTHERWISE NOTED.
 - RECEPTACLE AND SWITCH PLATES SHALL BE METAL.
 - PROVIDE ACCESSIBLE SPLICE/JUNCTION BOXES AS NEEDED.
 - PROVIDE NEW TYPED PANEL DIRECTORY TO REFLECT AS BUILT CONDITIONS.
 - MOUNTING HEIGHTS ARE AS FOLLOWS UNLESS OTHERWISE NOTED.
- LIGHT SWITCHES**
- OPERABLE PARTS SHALL BE LOCATED NO HIGHER THAN 48" ABOVE FINISHED FLOOR IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH THE MAXIMUM HEIGHT SHALL BE 44".
- HALL RECEPTACLES**
- OPERABLE PARTS SHALL BE LOCATED NO LOWER THAN 15" ABOVE FINISHED FLOOR.
- COUNTERTOP RECEPTACLES**
- OPERABLE PARTS SHALL BE LOCATED NO HIGHER THAN 48" ABOVE FINISHED FLOOR IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH THE MAXIMUM HEIGHT SHALL BE 44".
- RECEPTACLES/DATA (UNDER DESK)**
- COORDINATE WITH ARCHITECT NO LOWER THAN 15" ABOVE FINISHED FLOOR.
- PHONE JACKS**
- OPERABLE PARTS SHALL BE LOCATED NO HIGHER THAN 48" ABOVE FINISHED FLOOR. IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH THE MAXIMUM HEIGHT SHALL BE 44".
- GRT JACKS**
- OPERABLE PARTS SHALL BE LOCATED NO HIGHER THAN 48" ABOVE FINISHED FLOOR IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH THE MAXIMUM HEIGHT SHALL BE 44".
- EMERGENCY LIGHTS**
- 96" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING WHICHEVER IS LOWER.
- EXIT SIGNS**
- 96" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING WHICHEVER IS LOWER.
- FIRE ALARM HORN/STROBES**
- 80" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING WHICHEVER IS LOWER.
- FIRESTOP**
- PENETRATIONS FOR CABLES, CABLETRAYS, CONDUITS, PIPES, TUBES, COMBUSTION VENTS, AND EXHAUST VENTS, WIRES, AND SIMILAR ITEMS TO ACCOMMODATE ELECTRICAL, MECHANICAL, PLUMBING, AND COMMUNICATIONS SYSTEMS THAT PASS THROUGH A WALL, FLOOR, OR FLOOR/CEILING ASSEMBLY CONSTRUCTED AS A FIRE BARRIER SHALL BE PROTECTED BY A FIRESTOP SYSTEM OR DEVICE. THE FIRESTOP SYSTEM OR DEVICE SHALL BE TESTED IN ACCORDANCE WITH ASTM E 814 OR ANSI / UL 1479.

FIRE ALARM EQUIPMENT SCHEDULE

SYMBOL	DESCRIPTION	REMARKS
⊙	VISUAL NOTIFICATION DEVICE	PROVIDE DEVICE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM
⊙	AUDIBLE VISUAL NOTIFICATION DEVICE	PROVIDE DEVICE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM

- NOTES:**
- ALL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH NFPA, STATE LAWS, LOCAL CODES & ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
 - THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL & LABOR TO SATISFY A COMPLETE AND WORKING SYSTEM AS SPECIFIED AND/OR IMPLIED.
 - THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS & PAY ANY & ALL FEES AS REQUIRED.
 - THE CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO FIRE DETECTION/SIGNALIZATION SYSTEM.
 - FIRE SAFE ALL OPENINGS IN WALLS, FLOORS AND CEILING RESULTING FROM THE INSTALLATION OF THE FIRE DETECTION/SIGNALIZATION SYSTEM WITH UL LISTED FIRE STOPPING COMPOUNDS.
 - CONTRACTOR SHALL VERIFY EXACT QUANTITIES ON THE DRAWINGS.
 - CONTRACTOR SHALL PROVIDE FOR REPLACEMENT, EXPANSION, UPGRADE, ETC. OF EXISTING FIRE ALARM PANEL SYSTEM AS REQUIRED TO INCORPORATE NEW DEVICES.
 - CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, AND SUBMITTALS AS REQUIRED BY LOCAL CODE OFFICE.

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 Plumbing
 Fire Protection
 Construction

ELECTRICAL NOTES AND SCHEDULES
 FOR
SIGNATURE SCIENCE
 SITUATED AT
 600 AVIATION RESEARCH BLVD.
 EGG HARBOR TOWNSHIP, NJ 08234

AS NOTED
 DATE: 9/5/2023
 DRAWN BY: KAP
 CHECKED BY: DJF
 APPROVED BY: DAL SR.

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